DOCUMENT RESUME

ED 401 460 CE 072 976

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TITLE	Managing Vocational Education and Training in Central and Eastern European Countries. Report of a Programme on the Training of Researchers in the Management of Vocational Education and Training. IIEP Research and Studies Programme. The Development of Human Resources: New Trends in Technical and Vocational Education.
INSTITUTION	United Nations Educational, Scientific, and Cultural Organization, Paris (France). International Inst. for Educational Planning.
PUB DATE	Jun 95
NOTE	367p.
PUB TYPE	Reports - Research/Technical (143) -- Collected Works - General (020)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Competition; Developing Nations; Economics; *Educational Administration; *Educational Change; Educational Planning; Foreign Countries; *Free Enterprise System; *Job Training; Labor Force Development; Postsecondary Education; Privatization; Secondary Education; *Vocational Education
IDENTIFIERS	Estonia; *Europe (Central); *Europe (East); Hungary; Lithuania; Poland

ABSTRACT

This document provides materials prepared for and discussed at a workshop to analyze the problems facing Central and Eastern European countries in the management of the vocational education and training (VET) system. Part I gives an outline of the major research findings and reflects the discussions of the workshop. "Management of Vocational Education and Training in Central and Eastern Europe: Outline of Recent Developments and Major Issues" (Olivier Bertrand, Francoise Caillods) focuses on the workshop's four themes: changing the architecture of the VET system; sharing responsibilities and the decentralization process; the role of enterprises and the relationship with the economy; and the instruments required for monitoring and regulation. A workshop paper, "The Process for Changing the Architecture of the Education System in Eastern Europe" (Peter Grootings), suggests a more systematic analysis of modernization and structural reform aspects of educational change is necessary. The second workshop paper, "Improving the Responsiveness of Vocational Education and Training: Flexibility and/or Consistency" (Marianne Durand-Drouhin, Olivier Bertrand), points to tensions in countries between objectives of flexibility in VET and consistency. Part II includes the four quite extensive national research reports: "Questions and Answers in Hungarian Vocational Education during the Transition Period" (Judit Lannert); "Restructuring Vocational Education in Poland within the Context of a Free Market Economy" (Stefania Szczurkowska); "Changing Teaching/Learning Conditions in the Industrial Vocational Training Institutions and Employment Situation of Graduates in Lithuania" (A. Vidimantas Bumelis, Violeta Rimkeviciene); and "Diagnosis of the Estonian Vocational Education System: Indicators for Evaluation and Monitoring" (Reet Neudorf). The country report concerning Estonia is focused on the main indicators for a diagnosis of the VET system. The others deal more broadly with the management and reform of the system. Appendixes include the workshop agenda and participant list. (YLB)

ED 401 460

IIEP research and studies programme

The development of human resources:
New trends in technical and
vocational education

Managing vocational education and training in Central and Eastern European countries

Report of a programme on the training of researchers in the management of vocational education and training

Françoise Caillods
Olivier Bertrand
David Atchoarena

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International Institute for Educational Planning

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With papers from:

Judit Lannert
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This workshop was prepared thanks to a contribution from the European Union within the framework of the Network Educational Science Amsterdam (NESA) (Epicures project). NESA is a network in which more than 30 European and a few non-European faculties and research institutes co-operate in the area of education.

The publication costs of this volume have been covered through a grant-in-aid offered by UNESCO and by voluntary contributions made by several Member States of UNESCO, the list of which will be found at the end of this report.

This volume has been typeset using IIEP's computer facilities
and has been printed in IIEP's workshop

International Institute for Educational Planning
7-9, rue Eugène-Delacroix, 75116 Paris

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Introduction

by Françoise Caillods

Introduction

The transition which is currently sweeping through Central and Eastern European countries has shaken the foundations of the vocational education and training systems in these countries. These systems were originally designed to serve the requirements of a centrally planned economy, primarily emphasizing industrial production. In recent years, the industrial tissue onto which training institutions were grafted has collapsed, due to the privatisation of the State enterprises and the introduction of the market as the main price-regulating mechanism. Enterprises which are now forced to be competitive no longer recruit all vocational education graduates and they no longer provide, as they used to, students with practical training. Vocational schools have thus lost their main support as well as employment opportunities for their graduates. State funds also have become scarce, affecting teacher salaries and limiting other financial resources for training. This is again endangering the quality of the training provided.

Yet a qualified workforce, able to produce goods and services according to international standards, is necessary to support the current economic reform and the emergence of an economy able to compete on international markets. This requires an extensive investment in training, retraining and upgrading of the workforce.

Achieving such a goal requires profoundly reforming the system, with changes affecting the educational structure, the flow of pupils entering initial vocational education, the types of specializations offered, and the curricula. Just as important are the changes that should affect the management of the vocational education and training system: the decentralization of the decision-making process, the establishment of new relations with the enterprises and the world of work in general, and the definition of proper regulating and monitoring instruments.

All Central and Eastern European countries have in fact initiated reforms in the structure, organization and management of their systems of vocational education and training. A number of initiatives have been taken, at the central and at the local levels. At the same time, the process of establishing a democratic society has led to a redistribution of power and to the emergence of new actors and this has far-reaching implications for the process of decision-making and policy formulation in education, including vocational education.

Monitoring the changes that are taking place in the management process in particular, analyzing the present conditions of the vocational education and training institutions and evaluating the impact of some of the measures which have been taken is essential for policy-makers and educational administrators.

Such were the objectives of a programme undertaken by the IIEP with the support of the European Commission (DG XII), within the framework of the NESA/Epicures project. This programme aimed at training researchers from Central and Eastern European countries in the area of the management of the vocational education and training system, thus contributing to the building of national research capacities in the region. Another objective was to establish a network of researchers with a view to facilitating the exchange of information on the experience gained by different countries.

Five researchers from Estonia, Hungary, Lithuania and Poland were thus selected on the basis of their previous experience, their interest in the area and their attachment to an institution conducting research. These researchers were invited to come to the IIEP for two weeks in February, 1994. Each of them selected a research topic and developed a proposal with the help of the IIEP staff. Upon return to their home countries, they carried out their own research which, in four out of five cases, entailed conducting detailed interviews at the central and local levels and gathering data from a limited number of schools. Continuous exchange took place between the researchers and the IIEP staff. The former returned to the IIEP for two weeks in October in order to finalize their respective documents.

The four reports prepared as a result of this research constituted the basis for a discussion with representatives from international organizations and experts, during a workshop held at the IIEP in Paris from 19 to 21 December, 1994[1]. This discussion underlined the fact that the analysis of the problems facing Central and Eastern European countries is of a particular interest to other countries. Indeed, most of these problems, which are presently particularly acute in these countries are in fact common to other countries throughout the world: reforming the system of vocational education in order to adjust it to the needs of a market economy raises many issues, one of them being that of the transferability of foreign "models" and experiences into a different context.

The following document should be seen in this broader perspective. The first part gives an outline of the major research findings and reflects the discussions of the workshop. The second part of the volume includes the four national research reports. One of them, concerning Estonia, is focused on the main indicators for a diagnosis of the VET system. The others deal more broadly with the management and the reform of the system.

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[1] Thanks to the participation of representatives from the Czech Republic and to the documentation they provided, additional information concerning this country has been taken into account in this document.

Part I

Major issues in the management of vocational education and training: summary of the debates in the final workshop

Management of vocational education and training in Central and Eastern Europe: outline of recent developments and major issues

by Olivier Bertrand (Consultant, IIEP)
Françoise Caillods (IIEP)

After a brief presentation of the economic and educational context in the countries concerned, this presentation focuses on four major themes which were particularly analyzed in the research contributions and discussed during the workshop : changing the architecture of the VET system ; the sharing of responsibilities and the decentralization process ; the role of enterprises and the relationship with the economy ; the instruments required for monitoring and regulation.

1. The context

A comparative analysis of the national reports suggests strong similarities between them, particularly with regard to their respective economic situations. However, greater differences are apparent in the way their vocational education and training systems are trying to adapt to the new context.

Following the collapse of the centrally-planned economic system, Central and Eastern European countries entered into a period of deep recession, with substantial decreases in the GDP (up to 24 per cent between 1990 and 1993), unknown to Western industrialized countries [1]. Large manufacturing enterprises, which used to export to the former Soviet Union have been particularly affected by this change, suddenly being faced with competition from more efficient Western industries.

The four countries have become engaged in their own particular manner in a process of privatization and are beginning to show some signs of recovery, at least in terms of macroeconomic indicators. At the same time, and as a major and probably long-term result of the recession, a sharp reduction in employment levels were recorded together with the emergence of unemployment. As indicated by the country reports, its exact impact is however hard to measure : a number of unemployed people do not register (as indicated in the report from Lithuania); moonlighting is expanding and the statistics are not always adequate. This makes inter-country comparisons difficult and limits the possibilities of analyzing what should be an important aspect of the research: the unemployment of graduates. Estimates are however included in the report on Hungary and a specific survey was conducted in Lithuania (see below).

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1. The basic information is contained in each of the country reports which follow. A comprehensive regional picture may be found in J. Timar (1994).

In all these countries, the level of education was comparatively high in terms of enrolment ratios at the secondary level and of the quality of teaching in general education (for instance, in science). Access to the higher level however had been limited compared to Western Europe.

Concerning the VET systems, it should be borne in mind that Central and Eastern European countries had long-standing traditions of their own before the Second World War, but then went through a process of unification along the lines of the Soviet model. The Baltic States were fully integrated into this model. It entailed a somewhat larger proportion of pupils following general studies upon completion of elementary school, implying a more important role for enterprises in training at a later stage. A characteristic which is more typical of the other countries, such as Hungary and Poland, was the very high proportion of students going to skilled workers vocational schools (usually, of a three-year duration).

In all the countries covered by this research programme, technical and to an even larger extent vocational schools (especially in industrial areas) are those which have been most affected by the new economic context. First of all, the quality of general education and of training in skilled workers vocational schools leaves much to be desired. Second, an exceedingly high degree of specialization has been required up to now, leading to specific occupations. Finally, a number of enterprises have closed their schools or have withdrawn their support, so that opportunities for practical training have become limited. These circumstances may explain why the employment of graduates from these schools is becoming particularly difficult.

Overcoming these problems has been a priority in the reforms and experiments which are analyzed in detail in the country reports and summarized below.

2. Changing the architecture of the VET system

As recalled by the paper by Peter Grootings (below), attempts at reforming the VET systems in Central and Eastern European countries date back to the 1970s. They were aimed at remediating some of the shortcomings of these systems, already identified at the time. They were initiated mostly by people inside the system (teachers and administrators). Nevertheless, for various reasons (political, a lack of resources, or administrative inertia), they were not implemented.

(a) Various steps towards modernization

In the new context, following the socialist system's collapse and the plunge into a deep economic recession, the need for change has become imperative. Yet, as expressed by one participant in the workshop, most countries have not yet any clear, overall idea of what their future educational system should look like and they are simply trying to cope with the most urgent issues. As a result, what has taken place up to now looks more like a modernisation of the former structure rather than a fundamental reform of the system.

Concerning the countries represented in the research, examples of modernisation include:

- New legislation, which has been established for instance in Hungary, where three separate Acts have been passed since 1990, respectively for general, vocational and adult education and training ;

- Changes in the school structure, for instance, in Lithuania, where basic school attendance is extended from nine to ten years, or in Hungary, where the new legislation extended the duration of schooling in general schools from eight to ten years, without excluding the continuation of the former type ;

- A shift in the flow of students upon completion of elementary school, away from the short and specialised vocational stream towards more general education (academic secondary or secondary vocational schools). During the two-year period 1990-92, the proportion of students receiving the former type of education decreased from 42 to 36.6 per cent in Hungary, from 48 to 37 per cent in Poland. In Estonia, it decreased from 32 per cent to 28 in Estonian-speaking schools, and from 25.8 to 25.3 per cent in Russian-speaking schools over a period of only one year. It is interesting to observe, on the basis of figures concerning students' applications to various schools in Lithuania, that the shift from vocational schools to general education seems to be as much the result of a change of attitudes on the part of students as of a clearly stated Government policy ;

- Experimentation with new types of schools. In Hungary, a project assisted by the World Bank concerns the development of secondary technical schools with a two-year period of orientation, followed by two years of broad training in a limited number of occupations, in addition to the preparation of the baccalaureate. Specialisation starts only afterwards. In the same country, craft trades are being developed under the leadership of the National Association of Craftsmen.

In Poland, experimental vocational schools are being developed, providing both general and vocational education, with a focus on general vocational knowledge and skills, while practical training takes place only during the third year. A new type of technical lyceum will provide a high level of general education enabling vocational flexibility and mobility and will give access to university as well as to other forms of specific training.

- Changes in the teaching contents : reduction of the number of specialised streams (especially in industrial areas), emergence of new specialities (especially in management, commerce and computer science) and modernisation of the contents of existing curricula ;

- Development of the private sector : the reports concerning Hungary and Poland describe the rapid expansion of private vocational schools and of training enterprises in specific areas for which there is now a demand ;

- There are also several instances of new programmes intended for the retraining of adult workers in accordance with the new requirements of the labour market. These programmes have not been analysed in detail in the framework of the research work presented here which focused on initial training.

(b) The need for more fundamental changes

These various forms of modernisation may be seen as rather traditional and approached essentially from inside the educational system. The discussion during the workshop suggested that the type of structural reform which would be required should not be limited to the sheer architecture of the system. A systemic approach would imply changing the whole logic of the system, the mechanisms relating the training system to the enterprises and, last but not least, the attitudes of the various people concerned. Educational change however is to be seen as a collective learning process including all the actors concerned, who should learn to work together. Hence its implementation will take time. Ideally, it would incorporate some innovative and alternative approaches which are beginning to emerge in a number of advanced industrialised countries : the learning enterprise or organization and the concept of integrated learning.

A more forward-looking approach would take into account the relationship between the school and the labour market, issues of labour allocation between sectors of activity and within them, the changes which are taking place in occupational structure and work organization and the relationship between these changes and the training contents and organization. It should also consider the opportunities for mobility within the training system and at a later stage.

On the other hand, a realistic appraisal of the situation must recognize that the prerequisites for a bolder approach are hardly fulfilled in Central and Eastern European countries. The main actors with the ability to stimulate innovation cannot easily be found, either in Government or among enterprises – a point which will be further discussed below. Changing attitudes is not something that you can be told to do as a result of an administrative decision in a top-down process.

As a possible answer to some of these objections, it has been suggested that more attention might be paid to attempting to shape new actors. From this point of view, the reform of the training system could be considered as an opportunity to develop procedures which would involve more partners. This would imply that it is probably easier to overcome the difficulties by cooperation and dialogue at the local level, where people have to cope with concrete problems, rather than at the central level.

The analysis of the developments which have taken place in the countries under review also suggests that even the steps towards modernisation are not necessarily related to formal changes in the legislation. There are instances where (as in Hungary, for instance) the various legislative Acts do not define a clear policy orientation. There are others (as in Lithuania, for example) where rather substantial changes have taken place at the school level without any formal legislative decision, but as a result of local initiative. For the participants at the meeting, the legislative aspects of change were not necessarily the most important ones.

It should also be kept in mind that a formal legislation requires a clear consensus on the direction change is to take. However, in some at least of the countries concerned, such a consensus does not seem to exist.

Either the policy-makers themselves do not have a clear idea of what should be done or the views of the various actors diverge, for instance, on the respective role of schools of general education, technical and vocational schools and enterprise-based training.

The latter situation is particularly described in the report concerning Hungary, suggesting divergences between ministries and between political parties concerning the desirable structure of the system and the role of the various types of schools. Extensive discussions are also taking place on this subject in Lithuania.

Countries offering their assistance are also often inclined to press for the adoption of their own model, whether it be Anglo-Saxon or German. Considering the uncertainty over the future of the economy and of the educational system, the participants at the Workshop were rather in favour of a third approach, according to which it is too early to adopt a final decision concerning the structure of the VET system. At this stage, the emphasis should be put more on the process of change rather than on issues of structure.

In the meantime, two orientations seem to be appropriate : priority should be given to the improvement of the quality of education and training ; experimentation has to be encouraged, which implies decentralization and local initiative (see below).

3. Responsibility for the management and regulation of vocational education

A major theme of the research undertaken in the four countries concerned the new pattern of distribution of responsibilities for training between the various actors. Recent years have seen a process of decentralization and progress in school autonomy. These developments require close monitoring. The system's regulation constitutes a challenge to the Government and other agencies operating at the central level.

(a) The decentralization process

A process of decentralization to the regional or to the school level has been going on for a number of years in many OECD countries. It is intended to contribute to the responsiveness of the VET system, particularly to its adjustment to local needs, to give increased responsibility to local actors and to facilitate their cooperation.

In a different context, decentralization holds an even more important place on the agenda of Central and Eastern European countries. Having inherited an extremely centralized and rigid system of vocational education and training, the need to make it more flexible and responsive is even greater. The country reports and the debates during the workshop suggest however that decentralization was not necessarily the result of a deliberate and well thought out policy. It may also have been the natural reaction of Governments faced with intractable financial and technical problems: it then became a necessity to decentralize those responsibilities that they could no longer bear to other actors or other levels of responsibility.

In such a context, some observers have been speaking of "forced decentralization". They consider that this process tends to be limited to a power devolution, transferring the problems to the lower administrative levels, whereas what would be needed is a positive policy aiming at a new pattern of distribution of powers between the various actors. Some progress in this direction has been made, however, with the gradual building up of groups of actors who know what they want (as to a certain extent in Hungary). It would be desirable to go further than simple consultation and consider that cooperation with social partners works only when they participate more actively in the decision-making process. In Western countries also the decentralization process gives rise to problems. Whether decentralization is always the result of free choice, rather than the outcome of a conflict, may be questioned.

This being said, developments have widely differed between the countries. The move towards decentralization has been particularly bold in Hungary, where elected local authorities have been given a considerable amount of authority on opening, closing, financing and administering schools, changing the school structure, appointing the teachers and even on the contents of training. Nevertheless, in a period of transition, there is still some uncertainty about the distribution of power between the various actors. There are problems of coordination between the central and the local levels and the attempts to set up consultative bodies and institutions working in a democratic way may contribute to a certain slowness in the decision-making process.

In Poland, greater responsibility has been given to superintendents at the regional level, in order to control the overall national policy. The difference with Hungary is that they are essentially local representatives of the State administration. In Estonia and Lithuania, with the former system most decisions were taken in Moscow where all the planning was carried out. Now the power has been transferred to the Ministry and there is no intermediate level between the Ministry and the schools. No formal decentralization policy has as yet been considered.

There is no general rule on what should be the role of the State. Different models exist : the State may be the provider of training, may set the rules or may leave it entirely to the market. There is no rule either on how to allocate funds to the schools. What is needed is transparency and a reference to clear indicators. The legal framework should define the extent of autonomy of the various actors at different levels (national, regional and local) and its different aspects. It should also define the kind of reporting required by schools and/or local authorities to the Centre, or the type of control to be carried out by the Central authorities.

A problem may arise if the level at which educational and training decisions are taken does not coincide with the level where this type of decision is meaningful from the point of view of the economy and of the labour market. The labour markets usually operate at a regional level but at such a level Government representatives may only have a limited amount of power (as in Hungary, where local governments exist at lower levels), or may not be concerned with educational matters.

It should also be clear that it is not sufficient to discuss concepts in the abstract; it is not adequate in particular to attempt to transfer innovations implemented in Western countries to Central and Eastern Europe, without taking due account of their specific historical, political and financial context. There, the problem of decentralization of authority on training issues has to be seen in the more global context of the process of developing democracy. Many things which go without saying in Western Europe are not yet entirely clear in Central and Eastern Europe, including the possible limits of power sharing.

Furthermore, it should be underlined that cultural traditions vary between these countries and an appraisal of the decentralization process has to take into account the specific cultural context. Where there is more a tradition of assuming local responsibilities (which seems to be the case in Hungary), decentralization may be a powerful element in changing the system. In other contexts, it is likely that the people in charge will feel overburdened and helpless.

(b) School autonomy

The progress in school autonomy can also be observed in a number of OECD Member States. Concerning Central and Eastern European countries, school autonomy was introduced mainly because it was the only possible way to cope with the limitations of the State's capacity and to ensure some degree of responsiveness to the new context. The scope of this autonomy is not always clear: it could concern the choice of courses, the training contents, the recruitment of teachers or the collection of additional resources.

Illustrations of these situations may be found in the country reports, especially the one concerning Hungary, where schools seem to enjoy a very large degree of autonomy. In Poland, the official policy is in favour of more school autonomy, but there remains apparently greater control on the part of the Ministry of Education. Nevertheless, the report refers to a number of experiments largely based on school initiative. In Lithuania, it appears that without any legal change in favour of autonomy, vocational schools have been able to work "de facto" in a very autonomous way. For a number of them, autonomy was a means of survival in an extremely difficult context.

One of the issues raised by the research was the identification of the factors which determine the efficiency of individual schools, at least in terms of their capacity to survive and to adjust to the new context. The investigations suggest that the most important factor is the attitude of the headmaster and particularly his/her ability to interpret the information available on the labour market and to make the necessary decisions regarding change in the school orientation and in setting up new courses responding to the new demands.

Conversely, those headmasters who were simply waiting for instructions did not succeed: in some cases, the schools had to be closed or the number of students substantially reduced. In other words, managerial ability seems to be essential. Sometimes, the managerial role is taken up by the headmasters themselves; in others, by another staff member. This is partly a question of personality, but it can also be improved through training - hence the need to develop training courses.

Very often, greater school autonomy implies that school boards be established, involving more people (teachers, but also parents or representatives of local communities) in a process of taking over some of the managerial responsibilities.

As much as possible, accountability should go hand in hand with autonomy. However, considering the earlier discussion on the present situation of actors, the question was raised : accountability to whom : the central administration, the regional authorities, industry ? In some regions, there are very few local enterprises and accounting to them would be a source of bias.

Nobody questioned the validity of the move towards decentralization, but if more autonomy was to be left to the schools, it would also be important to give them the means to do things. Too often, they do not have sufficient resources to produce teaching materials and equipment, nor are they equipped to evaluate employment trends and skill requirements. They cannot work if no agency is there to give them the necessary means or to impulse a policy. Nowhere is school autonomy complete. In the present context of Central and Eastern Europe, schools need a lot of assistance in such matters as curricula, textbooks production, teaching techniques, and so on. Otherwise, quality will suffer.

The State should define the overall policy, start pilot projects, encourage local initiatives, set skill and qualifications standards. Then the implementation of the restructuring policy could be left to the regional authorities or to large towns.

(c) The need for regulation : a new challenge for the actors at the central level

The experience of some of the Western countries indicates that decentralization may lead to two opposite results : local actors may look for the national average and compete in order to attain the level of the national system ; or they may try to build up their own specificities, leading to increased disparities. In such a case, there is need for central control and regulation.

Generally speaking, the trend towards the greater responsiveness and flexibility of VET systems should go along with the search for consistency and the identification of regulating mechanisms. A consensus on the necessity to regulate exists, but the notion of regulation has to be clarified and it should be determined who should regulate what and which level of authority should have the power over which element of management.

This analysis applies probably even more so to Central and Eastern European countries, which are still going through a period of transition and do not have the same experience and traditions of autonomy and of sharing responsibilities. Regulation is particularly needed there, in order to control the quality of training and to make sure that the providers are not only trying to make it cheap. Where a private sector emerges, it is also necessary to ensure that everyone may have access to training and that there is no risk of excluding those who cannot afford it.

A clear policy has to be defined which outlines the responsibilities of the different partners in the financing process. Appropriate indicators have to be developed to govern the allocation of funds. Finally, regulation of the whole system is needed to introduce a more global and more long-term view of the socio-economic needs.

Meeting these regulation needs is a challenge for the new institutional set-up of Central and Eastern European countries.

At the local level, it is difficult to say yet whether the opportunities for coordination between actors offered by decentralization are actually used.

At the central level, important changes have taken place in the distribution of power between the various actors. In the former socialist system, much of the responsibility for training belonged to the technical ministries in charge of industrial sectors of activity. With the end of the centrally-planned economy, their responsibilities have been re-allocated in very different ways.

The actors at the central level

The new division of responsibilities at the central level is particularly complex in Hungary. The Ministry of Labour, which draws up and publishes the list of qualifications and training courses, has a central managing and controlling role. The Ministry of Education is responsible for the general education part of the curriculum and for the allocation of resources from the State budget, but most schools are maintained by self-governments. Other Ministries also have a responsibility for schools in specific areas. In addition, new consultative bodies have been established, such as the National VET Council, a tripartite forum including representatives from employers' organizations and trade unions. It provides advice on vocational education and training issues and makes decisions on the utilization of the Vocational Education Fund. The country report analyzes the positions of the various actors concerning this new context.

This situation contrasts with that of Poland, of Estonia and of Lithuania, where the main responsibility has been assigned to the Ministry of Education, which is not necessarily prepared to deal with the vocational aspects and their relationship with the economy. In Poland, for instance, the Ministry of Education retains a major responsibility regarding the conditions of pupils' enrolment, curriculum, textbooks, evaluation of pupils' achievements and examinations. It regulates the teaching process and the running of experimental schools. It distributes the budgetary funds to superintendents who allocate them to the schools. Other Ministries also run some specialized schools.

In the Czech Republic, apprenticeship now depends on the Ministry of Economic Affairs, vocational schools on the Ministry of Education and retraining on the Ministry of Labour, but it is not clear whether this will last and what should be the distribution of power. It is an example of the uncertainty which still prevails in many countries and which also concerns the sharing of responsibilities between geographic levels.

Some countries report that when several ministries are involved there are problems of coordination between them and that the educational perspective promoted by the Ministry of Education and the economic perspective promoted by the Ministries of Labour or of Economic Affairs may lead to completely different programmes.

It is difficult to draw conclusions and to say which of the following trends predominates : on the one hand, some central administrations tend to leave to other actors a large amount of responsibility; but on the other hand, these actors are often too weak to cope with it, so that ultimately the final decision is made by the administrations.

4. The relationship with the economy and the role of enterprises

Concerning the relationship between the VET system and the economy, three interrelated aspects have to be considered : the shortage of financial resources, the relationship with the labour market for the determination of training needs and the participation of enterprises in the provision of training.

(a) The shortage of financial resources

As mentioned above, the dramatic economic recession has implied a tightening of national budgets, while many large firms have withdrawn their support of training activities. On the other hand, decentralization at the regional level does not mean that regional or local authorities receive an adequate share of public revenue. As a result, the shortage of financial resources is often considered as the major challenge for these countries. It means that teachers' salaries are kept at a low level (with an adverse effect on their morale and motivations), but also that little or no additional resources are left for modernization of equipment and teaching aids, and also for innovation and experimentation.

Far from providing financial support, some enterprises ask to be paid in order to provide practical training to trainees. The taxation system does not always provide the appropriate incentives in this respect (see for instance the report on Poland). Generally speaking, the idea of training as an investment is not yet widely accepted.

For the time being, most problems are more or less solved on an ad hoc and local basis. School autonomy makes it possible to develop various initiatives for collecting additional resources. The development of a private sector, implying contributions from students and their families, is another approach. These initiatives raise the problem of regulation mentioned earlier.

More contributions may be expected from users and from enterprises, under specific conditions : there are already some promising experiences of partnerships and of cooperation. As for public funding, it should take the form of incentives.

(b) The relationship with the labour market

It is generally assumed that the main challenge facing the VET systems in Central and Eastern European countries is its adjustment to the changing needs of a market economy. This should particularly apply to the assessment of skill and training requirements. Yet, looking at the rather disappointing experience of advanced industrialized countries in this respect, one may wonder what can be done in countries facing a high degree of uncertainty with regard to the future shape of their economy. Furthermore, evaluation and anticipation are not only a matter of techniques, but they also require a machinery for research and cooperation with employers.

A major problem in Central and Eastern European countries is that no new frame of communication between education on the one hand and the economy and the labour market on the other has yet emerged. In most countries, the actors who could play this role are missing or do not have the ability to undertake the type of analysis that would be required. Even when discussions take place with employers or workers' representatives, there are few incentives to change the individual behaviour of the actors, including enterprises.

The emergence, from this point of view, of a new situation resulting from the creation of consultative bodies may be observed in Hungary (see Lannert, pages 51-130 in this report). In Poland, schools and enterprises have been encouraged to work together, in order to better meet the needs of the labour market, but the information and the mechanisms which would make it possible do not yet seem to exist. In the Czech Republic, a good relationship with the labour market has been established with the labour market programmes for unemployed and the strong tradition of cooperation between secondary schools and enterprises is being renovated.

In other countries, such as Lithuania, it is reported that there is no connection as yet between the VET system and the labour market. Furthermore, the very notion of a labour market is questioned in the present context. Schools are struggling on an individual basis to adapt their courses, not so much to the demands of enterprises, which are not clearly stated, but rather to the wishes of the students and their families, in order to find sufficient applicants and to maintain their activity.

Such a situation raises several questions : is the survival of the schools (or of an individual school) an objective as such, or should it depend on sufficient evidence that it meets national needs? To what extent do the wishes of the students and their families truly reflect the demands of the labour market? Satisfying short-term demands is one thing, but they may be different from the long-term socio-economic needs. These questions arising in connection with a growing autonomy of public schools also concern the growing private training sector.

Other questions may be raised with regard to the occupational objectives which can be assigned to adult training programmes when the problem is no more one of non-adjustment of the skill structure, but one of imbalance between the overall supply and demand of labour. In such a case, should not the priority be given to the recruitment of young people arriving on the labour market, rather than to the retraining of adults?

In any case, the experience of various countries (including in the West) shows that it is not possible to rely entirely on enterprises to anticipate future employment trends and training requirements. Governments should at least contribute to the collection of information and have a capacity to interpret the labour market's signals, as we shall discuss below.

In most Central and Eastern European countries, there is already a lot of information available on employment trends, but it is not systematically analysed nor is it presented in a way that is easily understood by central, or local administrators of vocational education and training. In any case, one should not expect specific and reliable forecasts, and the major challenge for training everywhere is to cope with uncertainty.

The discussion during the workshop concluded that there was a need to move from one kind of relationship with the labour market to another one. Training policies should try out new modes of regulation in order to rebuild new kinds of institutions.

(c) Participation of enterprises in the provision of training

Close cooperation with enterprises was a basic feature of the former VET system. However, in recent years, there has been little attempt to integrate teaching and production in the enterprises: either students simply participate in the regular production, or they are practising in workshops separate from the production context.

Following the withdrawal of large enterprises, a number of workshops have been taken over by schools. Others have started operating in an autonomous fashion, becoming a kind of private training centre. This happens in Hungary, where, paradoxically, the official policy is to involve the enterprises to a greater extent in training and to follow the German dual model.

In all the countries covered by the research, there is a policy of maintaining or even strengthening the links with industry. Nevertheless, implementing this policy is difficult, in view of the present state of industry. The situation greatly differs however according to the type of enterprise and a distinction can be made in the present context between four kinds of firms:

- The large companies which used to be the core of the public manufacturing sector in the traditional industries. As mentioned above, most of them are in a deep recession and have withdrawn their participation in or their support of training activities. This situation has had three serious consequences: a more acute shortage of resources at the disposal of schools ; a lack of training facilities, particularly for practical training, and a disruption of the traditional employment opportunities for graduates.

- Most of the new private enterprises belong to the service or to the high tech sectors. They are usually still very small and their structure is often quite informal. According to the country reports, for the moment many of them show little interest in training : when they recruit, they would be satisfied with young people having some kind of broad-based training. In any case, their training capacity is limited. However, this is probably an area for future development, using a more innovative approach.

- The situation is different with the craft industries which need employees with a practical know-how. Many of these enterprises are interested in recruiting young people through traditional apprenticeship. Developments in this direction are reported, for example, in Hungary and in Poland. In this case, though some problems remain : small enterprises usually do not have proper workshops and can offer only a limited range of training opportunities ; how can it be ensured that apprenticeship is really a form of training, that trainees receive a proper salary or stipend and that enterprises are not simply interested in employing cheap labour? In this period of transition, there are great differences between individual situations. Setting up the institutional framework and distinguishing the actors who will contribute to the regulation of the system takes time.

- Finally, there are the large foreign enterprises which came to these countries during privatization. They usually need well-trained labour in the most up-to-date technologies and types of organization. They often tend to organize their own training programmes, but they may also offer opportunities for cooperation with the school system, giving it a chance to increase its resources and to modernize (examples are given in the report on Poland).

Another solution to the provision of practical training which is also under consideration is the creation of inter-enterprise training centres, which could also be open to adults.

5. Monitoring the changes

Reference has been made earlier to the need for accountability and evaluation of the VET system, particularly in a context of experimentation and decentralization. This means that technical instruments are available. Three aspects have particularly received attention during the research and the discussion of its findings : the improvement of an information system and the evaluation of the output of the system, which requires mechanisms for assessment and certification, and data on the employment of graduates.

(a) Information

As mentioned earlier, information is an essential aspect of the improvement of the VET systems in these countries. In many cases, it is already available (although not yet on specific aspects of unemployment, such as the unemployment of graduates). But improvement is needed in two areas :

- relevance : there is enough information on stocks (of students, teachers, etc), but not on flows (graduates and students leaving the training system) ; it is often too limited to quantitative data and more qualitative studies are required to understand what they mean ; there is hardly any connection between the information collected on the school system and the more limited one concerning the labour market ; there is not enough emphasis on users' needs. In the context of a transformation process, there is a need to develop a system which would follow the different aspects of this change and would not simply reflect the present situation. As far as possible, the process of change should be analyzed in relation to the situation of other countries ;
- circulation and access. It requires proper mechanisms and a trained staff, as well as attitudes which facilitate cooperation. There is a need to develop a new culture of information, to see who are the users, what are the channels and what has been done in terms of capacity building. A capacity has to be developed for analyzing and interpreting the information and making it accessible to those who need it, especially the decision-makers and various actors at the regional and local levels.

The report concerning Estonia is focused on the improvement of databases. It identifies some of the problems faced by statisticians, concerning for instance the adaptation of international classifications to the national context. It underlines that they now answer the questions 'how many?' and 'how much?', but that there is now a need to determine how well the system is doing.

(b) Evaluation, assessment and certification

The lack of any systematic evaluation of the efficiency of VET systems can still be observed in most countries. As mentioned earlier, it becomes a serious problem when it is associated with a period of experimentation and with a move towards decentralization.

One suggestion is that there should be a shift from the traditional way of controlling only the inputs (especially the financial resources) to the control of the output of the VET system.

With this concern in mind, many Central and Eastern European countries are considering the development of a national system of standards and certification. This could undoubtedly be an important step towards the harmonization of school standards within a given country and some kind of quality control.However, some clarification may be needed on two points :

- to expect that the development of a single classification system could ensure some kind of simple correspondence between occupations and training courses would be unrealistic

- if it is desirable to bring together the concepts and standards to be established in Central and Eastern Europe and those that are already in use in Western European countries, it should be clear that common European skill and qualification standards do not exist.

To ensure the consistency of the VET system and to avoid differences between geographic areas and between schools, the system of control and assessment should preferably be carried out at the central level.

(c) Assessing the external efficiency of training through tracer studies

A very important aspect of the evaluation of the efficiency of the VET system concerns the situation of those who have completed their training. Whether they have found a proper job should be a major indicator of efficiency. In the present context of transition and of mounting unemployment it should be of particular interest in Central and Eastern European countries, but it is also particularly difficult : funds are lacking and conditions are changing so fast that the information collected may soon become obsolete.

There is no systematic collection of data of this sort in the four countries under study. However, in the framework of this programme, an experimental survey was conducted in Lithuania among the graduates from a sample of vocational and technical schools (detailed results may be found in the country report). This experience raises interesting questions concerning the feasibility of this type of study and the interpretation of its results.

This type of study obviously requires not only financial resources, but also a competent staff and a certain amount of coordination between different agencies. They can be found only if there is sufficient interest on the part of the authorities concerned.

Such studies need to have a fairly wide scope. The tracer study conducted in Lithuania, for example, indicated relatively high rates of unemployment for vocational schools graduates; negative conclusions should not be drawn too hastily on the future of vocational schools, however, as long as similar rates concerning grammar schools are not available. Indeed, the statistical analysis contained in the report on Hungary shows that unemployment is even higher among those who have left grammar schools.

Similarly, the discrepancy between the type of course followed and the type of occupation is not necessarily to be interpreted as a bad sign in a context of rapid transformation of the economy : it may indicate an ability to adjust to rapidly changing circumstances.

A word of caution was, however, introduced on the cost-efficiency of this type of study : what is the quantity of really new information that it provides? How are the results to be interpreted when the response rates are low? There are probably no universal answers to such questions, but in any case there is a need to develop an awareness of and a concern for these issues among school teachers and administrators.

More generally speaking, a cost-efficiency approach to the monitoring of the VET system is desirable. The development of indicators and guidelines should take place with a clear policy in mind. What is to be done with the results of an evaluation system has to be clarified also: for instance, in a context of school autonomy, should the assessment of the efficiency of various schools lead to providing further assistance to the most successful ones or on the contrary to those which are lagging behind? This is an important policy issue.

Concluding remarks

This review of the main issues faced by Central and Eastern European countries leads to a few general remarks which may conclude this report.

An important aspect which has not been covered in this research programme concerns the training and retraining of adult workers. The question of the relative role of initial and continuous training nevertheless has to be raised. In the present context of mounting unemployment and of apparent mismatch between the training provided and the new demands, two very different approaches may be put forward: the conservative approach would tend to help schools to survive, without any consideration for their economic efficiency, simply because they are there with their teachers and facilities. A more radical approach would be to suggest the closure of these schools altogether - or to let them die - and give priority to programmes for adults.

None of these approaches is entirely satisfactory : the first one is economically costly, it is inefficient and is not a good means of preparation for the future. The second one however is not socially realistic and does not include preparations on a long-term basis either. Sooner or later, the economy will recover and will need a skilled workforce with a broad training. What the shape of this vocational education and training system will be still remains to be determined.

There does not seem to be much discussion of this issue. Yet, establishing a closer link between vocational schools and training or retraining programmes for adults, which are usually provided in a different institutional context and in other facilities, is desirable. This suggestion was included in a recent report on Poland (Grootings 1993) and there are some examples of experiments with regional training centres working in this perspective.

The fact that no drastic and comprehensive reform of the VET system has yet taken place does not mean that nothing has happened. Indeed, many things are happening, but the most important ones are not necessarily the most conspicuous : they are often taking place at the local level, on the basis of individual initiatives. From this point of view, decentralization and school autonomy seem to have had positive effects. However, broad policy orientations and guidelines remain to be defined, together with the accountability mechanisms which will allow for the right balance between central monitoring and decentralized management.

The most important changes required concern the attitudes and have cultural connotations. Most probably, a long period of transition will be required. The cultural heritage, as well as the uncertainty concerning the future shape of the economy, militate in favour of giving time to these countries to develop their own system. The simple transfer of a foreign model is neither desirable, nor possible. What is important is the coherence of the future system, in relation to the overall institutional and cultural context of each country. Nevertheless, a careful and comparative analysis of foreign experiences may be useful for the progressive building of the future system. The research presented here constitutes an initial step in this direction.

BIBLIOGRAPHY

Grootings, P. 1993. (ed.). *Training in transition : comparative analysis and proposals for the modernization of vocational education and training in Poland*, CEDEFOP, Berlin.

Timar, J. 1994. *Particular features of employment and unemployment in the present stage of transformation of the post-socialist countries.* Paper for the European Economic Commission.

Workshop Papers

The process for changing the architecture of the education system in Eastern Europe

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1. Introduction

Attempts to introduce changes in the architecture of education systems in the countries of Central and Eastern Europe go back long before 1989. As a matter of fact, they have been on the agenda of educational decision-makers since the beginning of the 1960s. Due to worsening economic situations, on the one hand, and weak bargaining positions of Ministries of Education, on the other, none of the long-wished changes has ever been implemented. On the contrary, as a result of failure to introduce the necessary modernisation, the overall situation in education has steadily worsened.

With the final collapse of their economic and political systems, Central and East European countries have been faced since 1989 with a double challenge: to introduce modernisation, which had been overdue for many years, and to introduce structural reforms in the education system in order to bring it in line with the new economic and political realities. This double challenge had to be faced in a situation of deep economic crisis during which, again, educational change was not high on the priority lists of politicians and business people. Major financing of educational change has in fact been done largely through bi-lateral and international assistance, the latter either through EU Phare grants or with borrowed World Bank money. This has been accompanied by a considerable influence from donors on both the design of a new architecture and on the process as to how to achieve this architecture.

This paper suggests that a more systematic analysis of modernisation and structural reform aspects of educational change is necessary if the countries of Central and Eastern Europe wish to develop education systems that are to be of use in the future. The paper also suggests that an analysis of educational reform debates shows that many actors inside and outside the education system tend to concentrate on modernisation aspects and that there is as yet only little awareness of the need for parallel structural reform. While modernisation shows a high degree of continuity, structural reform requires by definition a certain discontinuity with previous situations. Structural reform basically implies that the 'logic' of the education system be changed. This, in turn, asks not only for institutional changes but also for changes in attitudes and behaviour of actors. Therefore, the process of educational change would have to be organised as a learning process for all actors involved, instead of a top-down introduction of a new model of education.

2. The debate about educational change: old habits or new clothes?

It has been argued recently, that although officially it is recognised that existing education systems are antiquated and should be radically changed, in practice, there are only few who are really interested in any changes at all and that these desired changes are rather marginal as compared to what is really required.

Those who are presently advocating educational change are the same who have been advocating this for more than 30 years already: teachers, administrators and policy-makers from inside the education system. For them, now it is the opportunity to finally realise their long frustrated claims for modernisation.

These claims are fairly well known: there is a much too large proportion of primary school leavers entering vocational education schools; vocational education is too narrow and too much oriented towards traditional industrial occupations; too small numbers finish full secondary education; too small numbers enter higher education; resources for education (curricula, materials, equipment, teachers' qualifications) are poor and do not secure sufficient quality. We can illustrate these claims with run-down school buildings, outdated textbooks, low salaries, absence of computers and other modern equipment, traditional knowledge-oriented learning strategies, an academically trained and highly feminised teacher corps, etc.). The present state of education systems in most – if not all – Central and East European countries is the result of the failed attempts to reorganise and modernise education in the early 1960s.

Structures of education, and sometimes even curricula and textbooks, reflect an education system that was designed to play a major role in building a socialist society during the 1950s. When the phase of so-called 'extensive' industrialisation came to an end, a complex mixture of political resistance, weak bargaining positions of educational actors, and lack of financial resources has meant that adaptation of educational structures and contents was not realised, although advocated by many educationalists. As a result, education lost much of its innovative and pro-active power and failed to contribute to the modernisation of the economy. Enterprises, being stagnant themselves, learned how to make best use of what the education system produced and stopped pushing for modernisation themselves.

It is against this background also that the wide gap developed between stagnating vocational secondary education for the masses and some centres of academic excellence for the few. The latter have always been of a very theoretical nature and have had little relation with the productive system, apart, of course, from the military industrial complex.

This is the background for 'claims for modernisation' and they basically depend on the availability of financial resources. A lot has been done in this respect already over the past few years. With assistance from bi-lateral and international funds (EU and World Bank) a beginning has been made to cure some of the problems: full secondary vocational and general education are being expanded; curricula and other resources are being modernised; university education is expanded with - in some countries - an attempt to set up a new type of higher, non-university education.

The main driving force for most educationalists at the moment is that numbers of students in full secondary and in higher education should become comparable with numbers reached in western countries. The underlying assumption is of course that that will be required by the employment system. One of the implications of these policies is that numbers entering basic vocational schools (into which in some countries between 50-60 per cent of all primary school-leavers used to be channelled) are radically being reduced. However, the impression prevails that this rather is the result of attempts to increase numbers in full secondary education a the result of a conscious policy directed towards improving basic vocational education itself. As a consequence, basic vocational education risks becoming a dustbin type of education for all who do not manage to enter secondary education. Sometimes, it is even suggested that this form of education will be faded out completely. From the experiences in many West European countries we know what will be the medium and long-term implications of such a situation.

From these developments one can learn that there are different conceptions as to the desired architecture of the education system being implemented. Simplifying matters a bit, one can discern a typical Anglo-Saxon approach, aiming at establishing secondary general education – eventually with broad based vocational preparation – to be followed by vocational specialisation and training inside the enterprises. This view is very much propagated by the World Bank, and Phare programmes have sometimes tried to prepare larger World Bank programmes, or have been used as a substitute financing mechanism. One can also find a more continental European approach, advocating for modernised forms of basic vocational education with transparent transition possibilities to higher education. This concept also assumes a greater role for schools in vocational preparation, at least during a transition period where enterprises do not show any interest in contributing to vocational education and training. Such conceptions are brought in as part of financial support programmes.

There is a third option, that claims that the architecture of the education system should be kept as open as possible during the transition period, in view of the many uncertainties with regard to the development of the employment system. Proponents of this third view also argue that this is not the moment to focus on the overall organisation of education but what is needed is a pragmatic and flexible approach which would use educational resources to develop or to respond to local employment development initiatives. It is suggested also that the focus should rather be on developing modern forms of adult education rather than to attempt now to change initial forms of education. Experiences made with innovation of adult education could be brought into the formal initial education system. In order to avoid that such local developments become too diversified, there should be close monitoring and guidance. Important in this approach is that a local infrastructure be developed and not a particular type of school.

Educational authorities have great difficulties in defining their own clear policy objectives. They are understandably caught between the urgent need for modernisation and the implicit policy objectives of donors and donor institutions since they are the ones who presently provide necessary financial resources. Modernisation has been requested by educationalists for years and there is an almost natural alliance between educationalists and donors at this level. A second drive is the attempt to "become more alike" western countries. This is being seen as the best guarantee that education will develop in the direction of what will be needed by the employment system, once the latter has come to full development. The question, however, is what this exactly means.

3. Vocational education and the labour market

Vocational education does not operate in a vacuum and it never did in a socialist economy. However, the relationship between educational and economic institutions was a particular one, based on political and administrative principles. The system had its own logic. There was strict input control over schools but students had guaranteed access to employment. Enterprises did not treat labour as a cost factor but as a scarcity. Most schools educated labour for specific enterprises and relations between schools and enterprises were well developed, though of a particular nature. Part of the education was organised inside the enterprise but in practice this was more characterised by becoming acquainted with work in entry jobs rather than practical training. Enterprises themselves were organised along the principle of extreme division of labour and the narrow profiles provided by vocational schools fitted well in this structure. There was little external mobility and the particular work organisation offered workers a possibility to develop into experienced and valuable workers for their particular enterprise. Work experience and the ability to cope with recurrent production problems caused by scarcity of resources rather than initial training determined the position of the workforce.

Practically all the above elements lost their value as soon as labour became a cost factor itself and enterprises had to compete for quality and cost on a market. Employment guarantees disappeared and schools have to educate for an anonymous and uncertain labour market. Vocational profiles proved outdated and clear guidelines as to alternatives were not available. The role and status of vocational education and schools changed completely: there was a new logic in place, but there was no experience to deal with this. As opposed to much of what we have called modernisation issues, the structural reform issues do not refer to internals of the school system but primarily to the relations between the school as an institution and its environment of labour markets and the employment system. The main problem of course is that the employment system itself is undergoing structural changes. At the administrative level, relations between schools and enterprises have become broken up and no alternative links have as yet been put into place nor have educational actors been able to develop alternative forms of behaviour and action.

A successful reform of both the VET and the employment system can only be achieved when Central and East European societies recapture the value given to education and training. Concretely, this means that individual investments in education – in terms of time and money – will have to be reflected in occupational positions, and in income and salary levels. This is true for the privately organised sector of the economy, as well as for the state organised sector of public services, including education. Obviously, this will imply a fundamental reversion of developments that have occurred over the last forty years.

Western countries have also had the experience that higher levels of education invoke dissatisfaction with traditional forms of work organisation and contents of work: people want to be able to make use of the qualifications and skills achieved. This again shows that simply increasing the levels of education further is no solution to current education and employment problems.

Relationships between education and work have become extremely complex in modern societies and these relationships can no longer be institutionalised through strictly separated and static systems of education and employment, as used to be the case in many Western countries; nor can their complexity be denied through an administrative system of formal one-sided dependencies, as used to be the case in Central and East European countries. The development of continuous mutual communication and adaptation between education and employment has become crucial.

The point to be made is whether, in a situation where the employment system is undergoing fundamental changes, both in its structure and in the way it is functioning, there is any sense in trying to design an overall architecture for the education system. Would it not be more advisable to give schools and enterprises the time to adjust to each other under the new circumstances? But will this adjustment develop spontaneously, for example, through the working of market forces or does this process need some guidance and coaching from outside? Furthermore, are the perspectives really completely open, or do we have already some indications about basic principles of modern education, for example, from experiences gained from the educational reforms of the past 10 years in Western countries?

4. Educational change as a collective learning process

Nobody will, at this point of time, either be able to present a detailed blueprint of how the Polish VET system should be, or to give detailed and precise instructions as to how to achieve this. It is possible, however, on the basis of experiences made elsewhere in Europe, to indicate the core issues that have to be addressed for Polish VET to be able to cope with its future tasks. This may be disappointing for those policy-makers who expect definite proposals that will lead to predictable success immediately. We should be frank and open, however, and underline that, apart from a number of recommendations concerning changes in the VET system which have already been put forward for a long time by many experts, immediate solutions to the more basic problems are not readily available. A change of the 'logic' of the system can only be realised gradually by those who are involved in vocational education and training themselves, especially at the local level. Like any learning process, however, this particular process will not develop spontaneously and needs to be facilitated and intensified by proper interventions and guidance.

The reform of vocational education systems should be seen as a process-in-time and not as a single policy act. While, in the case of the latter, institutional reform would do, our position has almost opposite implications. It means above all, that a 'final' architecture remains largely open for a considerable time, and that education systems most probably be characterised by the 'living together' of different solutions. At different moments and in different places, different problems will occur, for which – realistically speaking – different resources will be available.

Structural reform of VET systems will have to start from presently available resources and with full involvement of the locally existing actors. Realistically speaking – and apart from the absence of any comprehensive reform concept – neither the vast financial means, nor the human resources needed to develop and implement a fundamental reform, are available. On the other hand, initiatives, resources and capacities that are present at the local level (including those supported by foreign assistance) are not fully, or efficiently used. One reason for this may exactly be the desire to look for a quick overall reform.

It is not only because of future uncertainty and lack of basic resources that makes it unwise to set all hopes on a grand reform. It seems especially important, after a long period of central regulation and bureaucratic administration, to depart from a traditional 'top-down' reform conception. Instead, the guiding principle should be to improve and promote self-responsibility and self-initiative of local actors. Observers have noted, however, the 'learned helplessness' among local actors and their widespread waiting for guidelines and directions from 'above'. Even in cases where initiatives have been developed, the chance for success is frequently hampered by the lack of supporting infrastructures. It is an illusion that local initiatives for modernisation can be achieved by relying only on the operation of spontaneous forces of the market. A 'bottom-up' strategy asks for well designed and planned projects within an overall framework, for the realisation of which public support is needed, in terms of finances as well as in terms of professional advice and co-ordination.

In the discussions about the future challenges to VET systems in Western countries, some directions and tendencies have gradually become accepted. These developments will undoubtedly also become relevant for countries in Central and Eastern Europe. However, how and under which conditions these tendencies are - or can be - adapted and implemented, can only be worked out during the practice of the modernisation and reform process. No definite time schedules or deadlines can be given. This does not mean, however, that vocational education has to take a passive stand and wait until things are more clear. On the contrary, one of the major lessons of the past twenty years from EU countries shows that VET can play a very active role in social and economic development both by making people capable at taking employment initiatives and by simply creating demand for qualifications that previously were not available. VET is not only an agent that provides for (new) technical and economical skills and qualifications but it also transmits and develops individual aspirations and types of social behaviour.

In times of radical economic and technological change, VET systems are confronted with the problem of how to develop practice-oriented education in the absence of clear points of reference and with uncertain future employment perspectives. The only way to deal with such situations of uncertainty, is (a) to bring vocational education closer to the existing reality of enterprises and regional labour markets, and (b) to secure that in the training programmes and training methods sufficient attention is being given to developing skills – both technical and social – that enable people to cope with uncertainty.

This would mean, first of all, that instead of the traditional practical work periods (which have been largely characterised by the execution of simple work tasks), a real participation of enterprises in practical learning has to be developed. Practical work has to be changed into practical learning. Following the trends and experiences of western countries, the long-term aim should be to achieve an 'integrated dualism' where vocational schools function as the site of general and technical theoretical education, and enterprises as the site of practical vocational training, and where theoretical subjects and practical exercises are well integrated.

One of the conditions would be to have professional trainers available inside the enterprise with sufficient pedagogical skills. Where enterprises are not, or not yet, in a position to play such a role in vocational education, or where there are in sufficient enterprises with training capacities – such as in rural areas – Regional Training Centres could be established to cater for – various kinds of – practical training.

In order not to limit the occupational mobility of students and trainees to the local or enterprise-specific labour market, educational programmes and curricula should be developed according to the principle of 'progressive specialisation'. This would mean that in the first phase of education, basic knowledge and skills (technical, professional and social) of a more general nature are to be transmitted at the level of broad occupational areas such as 'engineering', 'construction', 'electrotechnics', 'commerce and trade', etc. The second phase would aim at a first specialisation at the level of related occupations. Only in a third phase the special skills and qualifications for a specific occupation (which should not be defined too narrowly and at a too low level) are to be developed with a major share of practical learning. The principle of 'progressive specialisation' is relatively independent from the overall organisation of the learning process, i.e. whether this is school – or enterprise – based, or whether this is structured more traditionally on an annual basis, or according to modules.

Such a broadly designed vocational education takes into account that vocational education cannot serve any longer for life-long employment in one single job, but has to provide the necessary foundations for both occupational activity and continuous education and training. Initial vocational education is no longer final education but only the first phase of a continuous life-long learning process.

Especially during the transition period, there will be a tremendous additional need for retraining of the workforce. The great efforts needed to develop within a short period of time a well functioning system of retraining offer good chances for the simultaneous development of both initial vocational education and further education. The market seems to react at present mainly to the needs for management training and business services; the equally high need for retraining of the unemployed and of those who are living and working in crisis regions requires the provision of public support. Regional Training Centres would provide the opportunity very quickly to realise new forms and contents of training. Experiences made in retraining, and with the developing regional labour market could easily enter into the programmes for initial education. As much as possible, such Regional Training Centres should therefore be multi-occupational, accessible to all vocational institutions from the region (including the schools that have no other access to practical training places) and make use of existing facilities and resources (including teaching staff). It may even be possible to physically locate regional training centres in the premises of existing schools.

Besides a renewal of educational contents, methods and forms of education and training play a crucial role in the achievement of modern vocational skills. For trainees to learn such elementary skills as to be able to act independently, to communicate, and cooperate with others, they necessarily have to be involved actively in the educational process. This means a fundamental departure from traditional classroom and teacher-centered forms of education. Many forms of such active types of learning have already been developed, such as work in projects, group learning, simulation games, etc. However, and this should not be forgotten, such new methods of education assume new roles for teachers and trainers. Teachers and trainers cease to be the vocational and technical experts of encyclopaedic knowledge or practical skills and rather become competent organisers of experience – and learning – processes. The learning process can be further supported by the interactive use of new media. Undoubtedly, this will have implications for the training and recruitment of teaching staff.

5. Organisation of VET: Local flexibility and national standards

Besides contents of educational programmes (practice-oriented and based on progressive specialisation) and methods of education (aimed at the promotion of new technical and social skills), the problem of recognition of educational qualifications has to be solved in a new way. The traditional approach has tried to exert central control on the quality of education through curricula programmes and contents and has resulted in the contradictory situation where bureaucratic administration and inflexibility concerning 'input' go together with a wide diversity of 'output' quality levels across the country.

Instead, and following recent experiences of several western countries, a national framework for occupational standards and qualifications should be elaborated by educational authorities in close co-operation with the social partners. Provision of education and training (including definition of curricula contents) can be flexible and locally determined but within a nationally agreed framework of qualification requirements. Examinations or tests lead to nationally – and eventually internationally – recognised qualifications. The system is to be valid for initial and further education and training and should also provide the quality standards for retraining programmes.

An additional advantage of a system of national standards is that its elaboration has to involve not only representatives from the education system. In most EU countries, industry and trade unions, representing the principal 'users' of educational programmes, discuss and elaborate basic occupational profiles which then form the basis for national qualification standards. The latter can be translated – in different ways, and with the assistance of educational professionals – into educational and training programmes. The role of national educational authorities is to make sure that standards are consistent – nationally and internationally – and that mobility between different types and levels of education is secured. Educational authorities can make use of the vast experiences already made with such forms of organisation of vocational education both at national (e.g. Denmark, Netherlands, Germany, United Kingdom) and international level in EU countries.

One note of caution concerns the temptation to simply imitate one of these existing systems. Contrary to what developers of such national systems may occasionally want to convey, experience with the development of a European system of qualifications has shown that such national frameworks indeed reflect national systems of occupational qualifications which differ considerably from one to the other. It should also be pointed out, that the development of national standards requires a huge amount of work, implying major investments and the availability of a professional research and evaluation infrastructure. However, the challenge of developing national standards may be used for restoring such research capacities.

Improving the responsiveness of vocational education and training: flexibility and/or consistency?

by Marianne Durand-Drouhin and Olivier Bertrand

Improving the responsiveness of vocational education and training: flexibility and/or consistency?

by Marianne Durand-Drouhin
and Olivier Bertrand

Since 1990, OECD has undertaken a series of research activities and international meetings on "The changing role of vocational and technical education and training (VOTEC)". This work included a review of policies in Member countries during the past two decades. One of the findings was the emphasis put by most countries on the need for more *responsiveness* of vocational education and training systems to changing needs for education and training. Two key concepts are to variable degrees and in variable combinations associated with the search for responsiveness, namely 'flexibility' and 'consistency'.

Responsiveness is needed with regard to (a) constantly changing and largely unpredictable requirements of labour markets for skilled labour, and (b) growing demands by young people for higher levels of education and for more diversified and individualized learning processes and pathways.

Responsiveness can be interpreted and may be achieved in a variety of ways. In *institutional and management terms*, three major developments may be identified:

(a) *First*, there is a clear trend towards more decentralised governance and management of education systems in general and of vocational education and training in particular. But decentralisation itself may have different meanings, depending on the level of responsibility under consideration : national, regional, local or school level. In France, which was the typical example of a centralised system, authority and responsibility for the location and equipment of vocational schools were in the early 1980s largely delegated to the regional level. In several Scandinavian countries, responsibility was transferred to local authorities and schools. They were given a great deal of initiative, including with regard to curriculum design and implementation, in order to satisfy diverse needs in local economies and of individual students.

(b) *Second*, the role of central government in educational planning is declining while industry is called upon to participate more actively in the design and provision of vocational education and training and of related certification and qualification systems. This incitation is in all countries addressed to employers' organisations and individual enterprises, while the involvement of trade-union organisations and workers' councils varies from country to country. Industry participation is expected to contribute to improved responsiveness of vocational education and training to both quantitative and qualitative demands in the labour market.

(c) A *third* trend, which is observed at varying degrees depending on the countries, is the development of training in enterprises and in private institutions and the related emergence of a 'training market' where public and private institutions may be competing. This trend is mainly related to the growing importance of adult training, which can itself be seen largely as a response to the demand for a more flexible workforce.

In terms of the ***structure, content and organisation*** of vocational education and training, the search for responsiveness has in particular led to:

- the diversification of training programmes and pathways;
- the broadening of curricula;
- the increased duration of initial training;

and, in some countries:

- the modularisation of courses and certificates;
- the introduction of competency-based learning and assessment.

All these developments are assumed to contribute to the adaptability of individual workers and to the flexibility of education and training systems. However, they also raise serious questions about the types of qualifications which young people acquire, about the costs and effectiveness of education and training pathways and about the consistency of the 'rules of the game' prevailing (a) in different sectors of national education and training systems, and (b) in the labour market.

These issues seem to be of interest to Central and Eastern European countries, which are going through a process of transition, from centralised and rigid education and training systems towards other (yet largely undefined) types of systems, expected to meet the demands of market economies. Considering that in the present context of uncertainty, these demands are to a large extent unpredictable, the need for adaptability and flexibility would seem to be even more pressing in 'countries in transition' than in most OECD countries.

Nevertheless, the implications of such orientations concerning the structure, organisation and management of VOTEC systems should be carefully examined. This paper points to certain tensions in OECD countries between objectives of 'flexibility' in vocational education and training on the one hand and 'consistency' on the other. The underlying question is whether flexibility and consistency can be conceived of as complementary rather than contradictory features of education, training and employment systems, and which regulatory mechanisms deserve particular attention in this respect.

This question will be considered from three points of view : the 'internal' flexibility and consistency of education and training systems; the 'external' responsiveness of education and training systems and the consistency between their internal organisation and objectives and the functioning of labour markets; and, finally, different approaches to 'system regulation', which may serve as a starting point for discussion about the context of education, training and employment in Central and Eastern European countries.

The following observations again draw heavily on some of the materials prepared in the framework of the VOTEC activity, especially for the final conference, held in Paris from the 28-30th November 1994.

I. Issues of internal consistency

1. Consistency between sub-systems and clarification of pathways

If flexibility means diversification of educational and training pathways, "it has also created certain problems, in the form of ever more sinuous, long and unfocused educational careers"[1]. The same paper observes that "while countries have moved closer to flexible and open systems (...) their strategies of reform and innovation tend to concentrate on one type and/or level of education and training at a time, rather than explicitly aiming at complementary transformations of all stages and in all relevant areas. And yet (...) the consistency of learning opportunities and pathways across types and levels of education and training (...) is essential".

This problem was already recognised by the Canadian contribution to the review of national VOTEC policies, when it said that "linkages between components within Canadian VOTEC must be strengthened (as) there is not, in fact, a Canadian VOTEC system, *per se*". Incidentally, those linkages are not even always guaranteed by a highly structured system[2].

One important aspect of the internal consistency issue is the much-discussed problem of the relative attractiveness of vocational and technical education on the one hand and of academic education on the other. Most OECD countries complain about the persistence of a bias in favour of the latter and many efforts to attract young people to the vocational streams do not take a sufficiently broad view of the relationship between them. For instance, one of the reasons for the preference for academic streams is the wider opportunities that they provide for further studies. But the attempts to open up the access of higher education to vocational students often fail because universities operate on a completely different logic and use different selection criteria. Improving vocational and technical education is therefore possible only through a systemic approach, encompassing all the components of the system. Such an approach may be conflicting with a policy which would promote a high degree of decentralization and of privatization.

2. Regional consistency

Some degree of convergence could be observed between the most extreme situations of traditionally highly centralised OECD countries (e.g. France) on the one hand and of federal States (e.g. the USA and Canada), where the responsibility for education and training is left to the States or to local authorities.

In the early 1980s in France, definite steps were taken towards some degree of decentralisation for regional and district authorities, which have been given more power to set up their own training objectives and to take decisions on the construction and location of vocational schools. One of the objectives was to increase the responsiveness of the system to local economic and social demands. While it is too early to assess the ultimate results of this move, concern is sometimes expressed about the consistency between national goals and objectives in the field of education and training on the one hand and local decisions which may be influenced, not only by specific labour and social requirements, but also by political considerations and interest groups. Such biases were expected to be avoided by the former system of a national school mapping, which has now been abolished.

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[1] Background paper for the VOTEC Conference, November, 1994.

[2] Where the implications of the massive expansion of enrolment in high schools for higher education do not seem to have been sufficiently anticipated, according to A. Legrand : 'Le système E'. 1994.

At the other extreme, reports by Canada and the US on changing VOTEC policies underline some of the limitations of a system which leaves most of the responsibility to local authorities and to training institutions themselves. Thus, according to the Canadian report, "A major provincial/territorial concern with federal training policy has been the federal Government ability to distribute effectively appropriate training opportunities across the country and, in effect, address the economic and social training needs of each region".

The USA report on the other hand states that any significant reform requires "clear, sustained and significant leadership from all branches of the National Government" and that "it is unrealistic to assume that local districts currently have enough resources to provide the necessary technical assistance to their staffs", so that a national technical assistance strategy is required, implying more resources at the National level. The report also underlines that "the primary unifying force for vocational technical education has been Federal legislation".

Indeed, a number of programmes have been initiated by the Federal Governments of both Canada and the USA to contribute to the achievement of common national goals and objectives.

These opposite, but to some extent convergent situations could be illustrated by the role of national certification frameworks with regard to regionally initiated programmes. In France, without calling into question the monopoly of the Ministry of Education, the need has been felt to leave some leeway to regional authorities for setting up training courses meeting local needs, provided they do not lead to a national diploma.

Still another situation is emerging in Scandinavian countries, where far more autonomy is being given to schools, not only from the point of view of management, but also of teaching content, with a view to adjusting to the diversity of local and individual demands. This development might raise the question of possible imbalances and inequalities between regions, schools and individual students. It is questionable to which extent such risks will be limited by the strong egalitarian tradition of these countries.

At the other end of the spectrum, a concern has been shared by most English-speaking countries about the multiplicity of assessment and certification systems. This situation puts into question the visibility and portability of qualifications, between regions as well as between enterprises.

This is one of the reasons why the United Kingdom and a number of other English-speaking countries have engaged in large-scale programmes to develop national vocational qualifications. Similarly, in the United States of America, there is now a strong move towards the establishment of national skill standards and certificates.

In contrast to many continental European countries, such skill standards and qualification systems are not related to industrial classification and remuneration systems through collective bargaining at national or sectoral levels. This is considered as an additional element of flexibility. However, the 'value' of such qualifications and their motivating effect on young people and adult learners may also be weaker than that of more 'holistic' and apparently 'rigid' qualification systems in continental Europe.

3. Consistency for the individual learner

As indicated above, in countries like the United Kingdom, the definition of national vocational qualifications is associated with a modular approach to training, allowing students to choose their own personal range and sequence of courses/modules (which can be provided by different institutions) and to accumulate corresponding certification units. Young people are thus – to some extent – encouraged to define their own individual learning pathways. Modularisation is also expected to allow for more rapid responses to changing labour demand. 'Flexibility' is thus pursued both from the point of view of students' interests and motivations and of labour market requirements.

One of the possible drawbacks of modular approaches is "the risk that young people will acquire only loose collections or incomplete 'puzzles' of narrowly defined skills or competences" [3]. Responsibility for the level of skills and the relevance and 'completeness' of skill profiles with which young people leave the education system is in such systems largely left to young people whose information, strategic planning capacities and financial possibilities vary strongly.

II. External consistency

A high degree of flexibility in vocational education and training is even more likely to raise problems of consistency between educational objectives on the one hand and the economic and social context on the other. In this connection, the review of national reports for OECD indicated that although responsiveness to the new requirements was declared a priority objective, there was only limited evidence of the implementation of this objective and it could be suspected that school-based systems at least still tend to operate primarily according to their own logic.

At the same time, there is a growing awareness of the fact that VOTEC systems alone cannot tackle the large-scale problems that post-industrial societies are facing. There is a need for a more integrated approach. The USA report, for instance, underlines that "the intractable problems of urban education do not lend themselves to isolated, categorical funding solutions and instead are best addressed by much larger scale efforts which involve the entire school community and all of the school's resources".

The most common problems arise, however, in connection with attempts to increase the responsiveness of vocational education and training to the changing needs of the economy. First of all, the experience of past decades has proved the inadequacy of econometric methods aiming at quantifying future training requirements. In addition, individual employers themselves are usually unable to take a long-term view of their future manpower needs. And the views of employers' organisations differ according to the branch of activity and to the size of the firm. Workers' organisations themselves may have different points of view, depending on their ideology and their sectoral or occupational structure.

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[3] Background paper for the VOTEC Conference, November 1994.

These are some of the limitations of a market-driven approach of vocational education and training. In addition, when training is essentially work-based and delivered under the main responsibility of industry, the regulation of the flow of apprentices may be subject to the variations of the economic context : during periods of recession, a number of enterprises may wish to reduce their training costs[4]. This would not be consistent with the need for longer-term investment in human resources and for a regular flow of trained people in order to maintain the proper skill structure of the workforce.

Another aspect which has received considerable attention during the recent seminar on 'Apprenticeship, alternance and the dual system' is the relationship between the operation of the VOTEC system on the one hand and of the labour market on the other. This is particularly important if, as in the contribution by B. Lutz at that seminar, it is assumed that a priority for OECD countries is the training of a strong group of professional workers, especially in the production sector. For B. Lutz, the best way and possibly the only way to achieve this goal is to maintain or establish occupational labour markets, which guarantee the recognition, maintenance and strengthening of 'professionality' acquired in high quality, work-based training programmes. This implies strong and institutionalized linkages between education and employment, including agreements on training delivery and the cooperation between schools and enterprises, but also on wages, career opportunities and employment conditions.

However, even such approaches raise problems of consistency between education and production systems. For instance, the background paper for the OECD conference asks whether a global (or 'holistic') approach of training for an occupation or a group of occupations can be maintained when the very notion of 'occupation' is being questioned by new forms of work organisation. Questions of this sort arise especially with regard to the growing sector of service activities.

Whereas such problems arise especially in connection with highly structured education and training systems in Europe, such as the dual system, another consistency issue may be raised with regard to (mostly English-speaking) countries which are now trying to develop national standards and qualifications systems. "To what extent (can they) improve the articulation between education and employment, if at the same time labour markets are de-regulated and enterprises adopt (or are pressured into) short-term strategies of recruitment, work organisation and training provision, emphasising 'flexibility' to the detriment of quality and progression"[5].

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4. As mentioned for instance by the reports from Denmark, the Netherlands and Switzerland to the seminar on "Apprenticeship, alternance, dual system : dead ends or highways to the future ?"

5. Discussion paper. Final Conference on the changing role of vocational and technical education and training. Paris 28-30 November 1994.

III. Regulating mechanisms and their applicability

The foregoing observations may suffice to underline the need for 'regulation' of vocational education and training systems themselves and of the interface with their social and economic environment in order to find the narrow path between two pitfalls. On the one hand a centralised, uniform and rigid system would not meet the needs of a modern economy, would limit adaptability and threaten the ability to innovate[6]. On the other hand, leaving individual schools and training institutions without any common framework of objectives and organisational conditions would not satisfy the long-term economic goals of quality and effectiveness and is likely to increase geographic imbalances and social inequalities. There is also the possibility that attempts to introduce some degree of flexibility through more decentralisation would mean that the central Governments retain authority on menial details and leave more important issues to be solved at the local level.

Among OECD countries, three types of – more or less satisfactory – approaches towards regulations may be observed, in terms of the roles and responsibilities of different actors :

- one with a dominant role of central Government (even after some degree of decentralisation);
- one where the social partners (employers' and employees' organisations) play a major role;
- one with a dominant role for local authorities and schools, which are expected to meet the demands of the market.

There is no point in trying to decide which 'model' is the best, since they are closely linked to specific cultural and historical contexts. Each one has its own 'logic' which it is important to understand. This means that it is not easy to transfer particular aspects of each model to a different context.

Ideally, successful system regulation requires both clear policy orientations and effective regulation mechanisms.

Clear policy orientations are particularly important in a context of strongly decentralised systems, be it at the regional, local or institutional level. The problem is that they are closely linked with diverging interests and politics, which often entails a high degree of instability.

As far as possible, policies should be based on a sufficient capacity of technical analysis and on a high degree of social dialogue. In institutional terms, this implies the need for:

(a) A framework for consultation among the various actors which, at the national, local and sectoral level, guarantees some degree of continuity, coherence consistency, especially between education systems and labour markets.

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[6] Wolf A. Some final thoughts : vocational education policy in a European context. European Journal of Education, No.2, 1993.

(b) Some kind of research and development structure, providing information and technical support to decision-makers, taking into account the variety of issues involved in the development of a VOTEC systems in relation to their social and economic environment. This includes full integration of VOTEC into the production and flows of knowledge which is at the base of modern societies; the development and monitoring of labour force information systems; the development of learning theory and appropriate teaching and training methods;

(c) Clearly defined and agreed financing arrangements which are a major element of the system regulation. This raises policy – or political – questions about the respective role of governments, enterprises and individuals. In addition, there are also technical issues related to the need for better measures of the costs of and returns to VOTEC. In most cases, only part of the data and the instruments are available, but the approach in itself can be beneficial as a basis for the discussion of policy orientations;

(d) Finally, there is the broader issue of evaluation. Again, the more decentralised the system, the more necessary it is to set up mechanisms allowing to evaluate its output and effectiveness. Certification is an important element of evaluation and it has to be seen, not only from the point of view of the educational system itself, but even more from the point of view of recognition on the labour market. The above comments concerning the limitations of a market-driven approach do not deny the fact that the ultimate value of qualifications depends on the market and not on administrative decisions. But the need for consistency pleads for some degree of cooperation between the actors and for some form of institutionalisation in order to regulate the market and transcend its most immediate and specific demands.

This brief overview of requirements or conditions of successful regulation refers to an ideal situation. In reality, it is clear that such requirements cannot easily be fulfilled, especially in the present context of Central and Eastern European countries. To mention only a few points, the institutions and the identity of the various actors are only emerging and the inadequacy of technical instruments is reinforced by the lack of resources. But, in one way or the other, responses to these problems, adapted to national cultures and traditions will have to be found.

Part II

Country Reports

Questions and answers in Hungarian vocational education during the transition period

by Judit Lannert

Preface

My original aim was to examine the possible effects of the Act of Vocational Education in Hungary, passed in June 1994. However, when I went out in the field and conducted interviews with the different actors in the field of vocational education (VET), I realized that my question was wrong. Practically speaking, the new Act has no effect as yet, because it will not come into force until next year, and, as this paper will show, many of the necessary conditions are missing. Moreover, elections have just been held (last spring), making the situation very uncertain.

However, I still think it would be very interesting to find out what the actors think about the new Act, because it is a critical issue, and opinions about it highlight the most vital questions in vocational education. The approach of the actors, and the attitudes of politicians, school leaders and entrepreneurs towards the Act also provide valuable information.

As I will show, there are several solutions to the problems of vocational education during this transition period, which makes the picture colourful but difficult. Never before has the country undertaken many experiments in education. Many schools must do something just to live up to expectations, or merely to survive. Some of these experiments are in anticipation of the new Act, while others lead in other directions. Due to the lack of a consistent educational policy, there are many contradictory changes in the field of general and vocational education and it is difficult to see in which direction the education system is moving. I think we have arrived at a turning point - from that point some of the less innovative schools will have to be closed down while the more innovative ones will flourish and develop, and problems within the school system will be resolved.

Through interviews with politicians, entrepreneurs and school leaders in Budapest and Debrecen I tried to find out what are the most critical issues in Hungarian vocational education during the present transition period, what kind of solutions exist and how they reflect the interests of the different actors in this field.

In the first and second chapters, I outline the exogenous framework of the Hungarian vocational education, that is, economic development, demographic changes and legal changes in the country. Then I describe the Hungarian education system and the changes in vocational education during the transition period.

In the third chapter, by analyzing the interviews with the actors on the macrolevel, I demonstrate the conflicts of interests between the ministries, employers' organizations and trade unions.

In the fourth chapter, I show what is happening on the local level and how the schools and self-governments are trying to answer the challenges, with varying success.

The interviews in the third and fourth chapters are organized around four major groups of problems:

(a) changing structure of the educationa system and opinions about the new Act on Vocational Education;

(b) problems of management of the VET system;
(c) problems of financing the VET system; and

(d) problems of practical training and the connection between vocational education and the economy.

1. CHANGES IN THE ENVIRONMENT OF VOCATIONAL EDUCATION IN HUNGARY

In the last few years, the Hungarian vocational educationa system has had to, and still has to, face up to many crucial challenges. As it was based on the large-scale industries with markets in the Eastern European countries, the economic recession and the collapse of the Eastern European markets resulted in the closure of workshops and led to a crisis in vocational education. At the same time, the 'baby boom' generation born in the mid-1970s tried to enter the schools and the labour market. Neither the schools nor the labour market were ready to receive them, so the rate of youth unemployment increased rapidly. Moreover, changes in the political system in Hungary make the situation very uncertain.

Thus, one reason for the crisis in the Hungarian vocational education during this transition period is the turbulence in the environment, i.e. economic recession, demographic changes and the new legal framework. In this chapter, using available macrostatistics, I will try to show how the environment of vocational education in Hungary has changed since the mid-1980s.

1.1 Economic changes

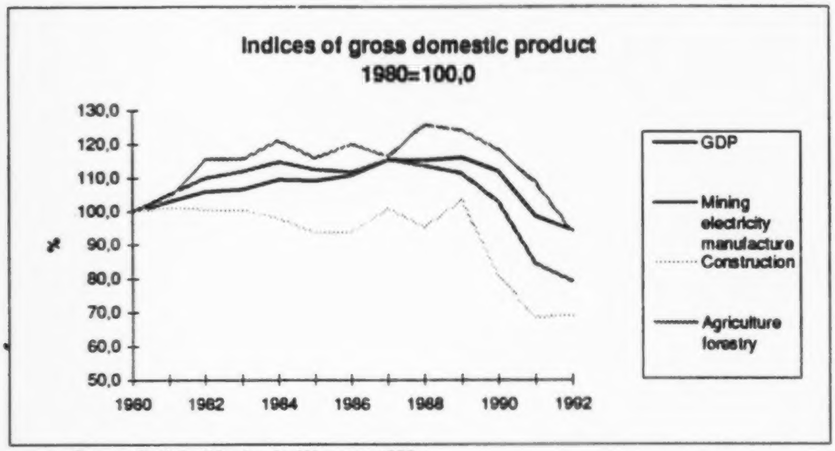
To determine what direction vocational education in Hungary should take and which model would be appropriate, it is useful to analyze the available economic data. A large industrial sector with many small enterprises might suggest a dual nature for vocational education, but a large service sector calls for more comprehensive training. I should point out here that, due to the transition period, our data show significant changes in the economy and in employment figures, and the uncertainties make planning extremely difficult.

Data show that the gross domestic product (GDP) has been decreasing since 1989 (*see Table I*).

Table I

Indices of gross domestic product (GDP)
1980=100,0

Year	GDP	Mining electricity manufacture	Construction	Agriculture forestry
1980	100,0	100,0	100,0	100,0
1981	102,9	105,0	101,2	103,3
1982	105,8	109,9	100,5	115,4
1983	106,5	111,9	100,3	115,5
1984	109,4	114,7	97,9	120,8
1985	109,1	112,3	93,4	115,8
1986	110,7	111,7	93,5	119,9
1987	115,2	115,3	100,8	116,3
1988	115,1	113,6	95,3	125,5
1989	115,9	111,3	103,2	124,0
1990	111,8	102,7	80,6	118,2
1991	98,5	84,3	68,5	108,5
1992	94,1	79,1	69,0	93,6



Source: Statistical Yearbook of Hungary, 1993

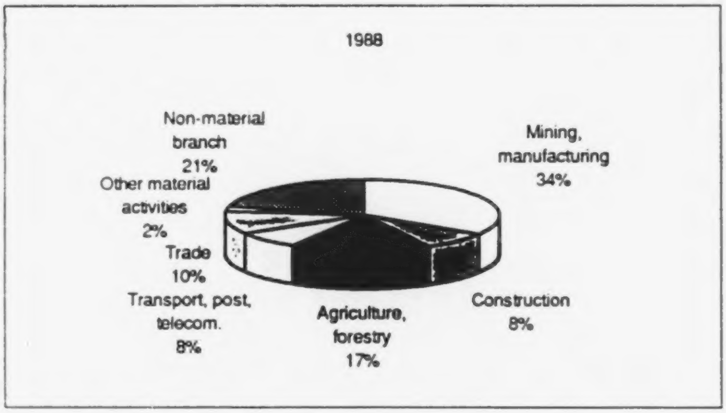
This table and chart give information on production in the fields of industry and agriculture. We see that mining, electricity and manufacturing production have been decreasing since 1987 and fell to 79.1 per cent in 1980. Construction stagnated between 1987-1989 and has since then fallen to 69 per cent in 1990. Agricultural production has been decreasing since 1986, but only fell below the 1980 value in 1992.

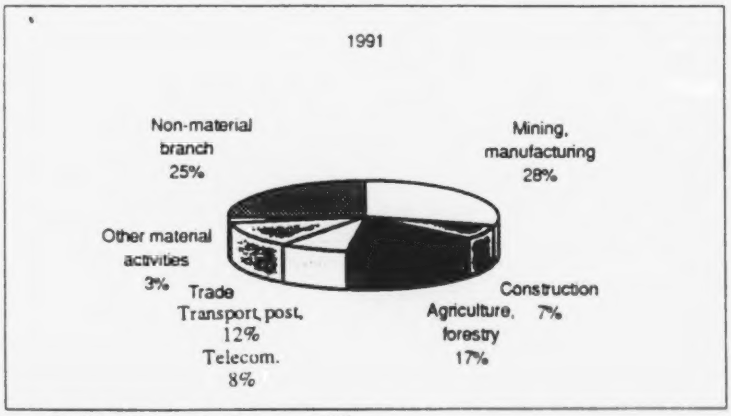
One might think that the depression had an impact on the structure of economy but, according to *Table II*, the structure of the economy has changed only slightly.

Table II

Sources of gross domestic product (GDP)
Percentage distribution at constant prices

Industries	1988	1991
Mining, manufacturing	33,90	29,10
Construction	8,10	6,70
Agriculture, forestry	16,50	16,50
Transport, post, telecom.	8,00	8,10
Trade	10,10	11,80
Other material activities	2,40	2,60
Material branches	79,00	74,80
Non-material branch	21,00	25,20
Industries, total	100,00	100,00





Source: Statistical Yearbook of Hungary, 1993

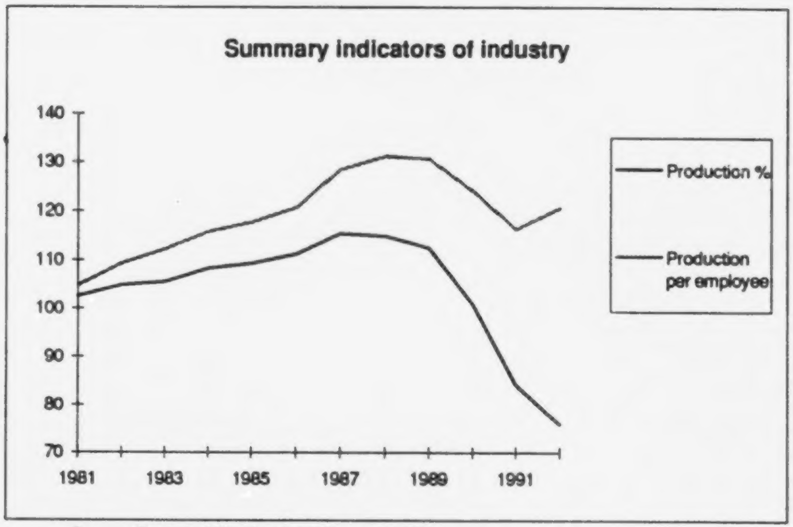
As for active earners by occupational status, 35 per cent of active earners, as of 1 January 1992, worked in industry and construction, 15 per cent worked in agriculture and forestry, 24 per cent in other material activities like transport, post and telecommunications and trade, and 26 per cent in the service sector (such as personal and business services, health, education and public administration).

The figures on productivity in the manufacturing industry show that productivity has been declining since 1988 (see *Table III*), with signs of improvement beginning to emerge only in 1992.

Table III.

Summary indicators of industry (1980=100%)

Year	Production %	Production per employee
1981	102,5	104,7
1982	104,8	109,3
1983	105,5	112,2
1984	108,2	115,7
1985	109,3	117,7
1986	111,2	120,6
1987	115,4	128,4
1988	114,8	131,1
1989	112,4	130,5
1990	100,9	124,0
1991	84,2	116,3
1992	75,9	120,7



Source: Statistical Yearbook of Hungary, 1993

All these data show that the Hungarian manufacturing industry and the economy as a whole are facing great problems - and nobody can see the end of the tunnel. As we shall see later, that is the main reason for the problems of vocational education. But the changes in economic organizations can also influence vocational education. While the big companies formerly trained groups of pupils in their workshops, now that they are privatized and the number of small enterprises is increasing, many apprentices are being trained individually by entrepreneurs. The following tables show that the number of economic organizations with less than 21 employees is growing, while the number of state companies with large staffs is decreasing (see *Tables IV* and *V*).

Table IV. Number of economic organizations[1]

Form of management	1989	1990	1991	1992
With legal status:				
State enterprise	2,400	2,363	2,233	1,733
Limited liability company	4,484	18,317	41,204	57,262
Company limited by shares	307	646	1,072	1,712
Co-operative	7,546	7,641	7,766	8,229
Without legal status:				
Deposit partnership	1,162	5,789	22,977	41,218
Individual entrepreneur	320,619	393,450	510,459	606,207

Source: Statistical Yearbook of Hungary, 1993

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[1] Economic organizations having legal status fall under the same rules of taxation as for companies, while economic organizations without legal status pay tax according to the rules of personal income taxation. The first group usually consists of larger firms and deposit partnerships often having only one or two members. As for responsibility, the owners of a limited liability company are responsible only up to a certain amount of money determined in the contract of foundation, but the founder of the deposit partnerships is personally responsible with his or her property. That is why people without property (for example, an older member of the family) are usually named as the founders of deposit partnerships, to reduce the risk of liability.

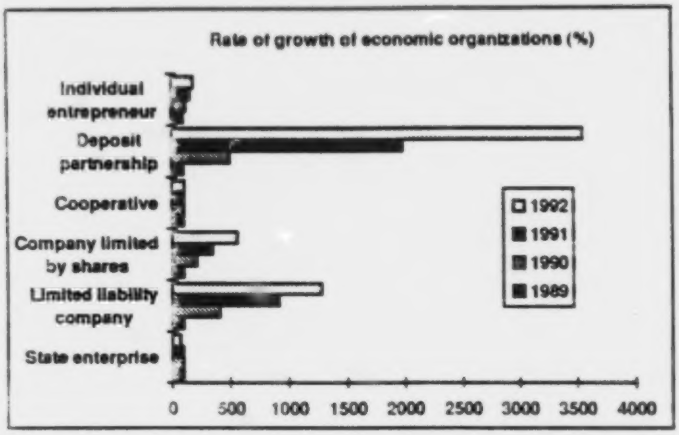


Table V. Number of institutions with legal status by staff number categories (excluding housing and garage co-operatives, organizations being liquidated and those with unknown staff number)

Year, form of management	Less than 21 persons	21 to 50 persons	51 to 300 persons	More than 300 persons	TOTAL
1989	5,105	2,387	3,459	2,617	13,568
1990	16,465	4,129	4,469	2,599	27,662
1991	36,810	6,168	5,373	2,396	50,747
1992	52,825	6,970	5,773	1,937	67,505
Of which: State enterprise	172	191	618	749	1730
Limited liability company	49,478	5,014	2,343	262	57,097
Company limited by shares	483	245	492	468	1,688
Co-operative	**1,966**	**1,394**	**2,203**	**446**	**6,009**

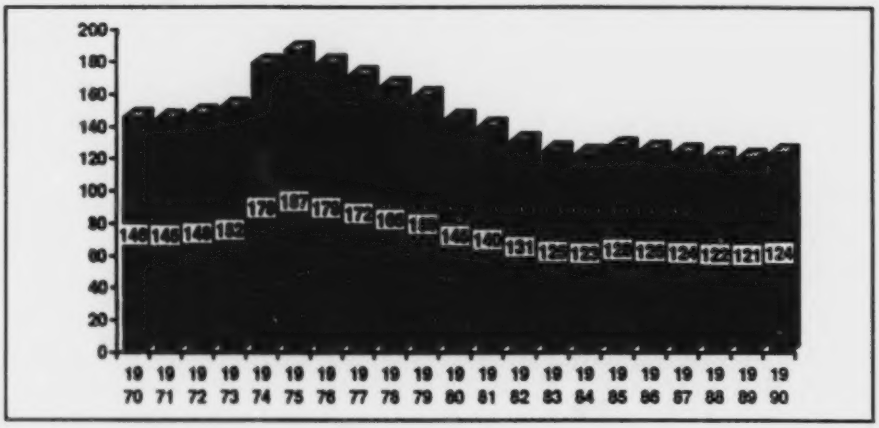
Source: Statistical Yearbook of Hungary, 1993

Deposit partnership and individual entrepreneurship also prove to be popular forms of economic organization. The number of individual entrepreneurs almost doubled between 1989 and 1992, increasing to 606,207 from 320,619. The number of deposit partnerships, which are corporations without legal status, seem to be the most popular form of economic organization. They increased 35 times in this period, from 1,162 to 41,218, while the limited liability companies and companies limited by shares increased by 12 times. This trend can be explained by the fact that these forms of enterprise are good ways of obtaining tax exemptions.

1.2 Demographic changes

Before looking at the employment situation, we should consider demography, because the fluctuations in the number of live births distorted the normal population pyramid into a kind of pine cone form.

Table VI. Number of age-cohorts (thousands)



We can see from *Table VI* that there was a big baby boom (children of parents born in the so-called Ratkó era in the 1950s) in the mid-1970s, which put strain on the schools and the labour market. This is the second major reason for the problems in the Hungarian vocational education, because this huge number of young people tried to enter secondary education when the institutions were not ready to receive them. Moreover, because of the recession, the number of the traditional workshops at companies decreased, resulting in fewer training places. The labour market could not absorb these young people either, which led to a high rate of youth unemployment in the 1990s, a subject which will be discussed later in this paper. While this baby boom seems to be over, schools, because they are financed through a quota system per enrolled pupil, are now struggling for their survival. As the number of live births drops, the number of pupils is also decreasing.

Economic and demographic changes have had a crucial effect on employment during this transition period, which is another factor of vocational education.

1.3 Employment

Tables VII and *VIII* show that the economically-active population has been decreasing since 1990 in Hungary.

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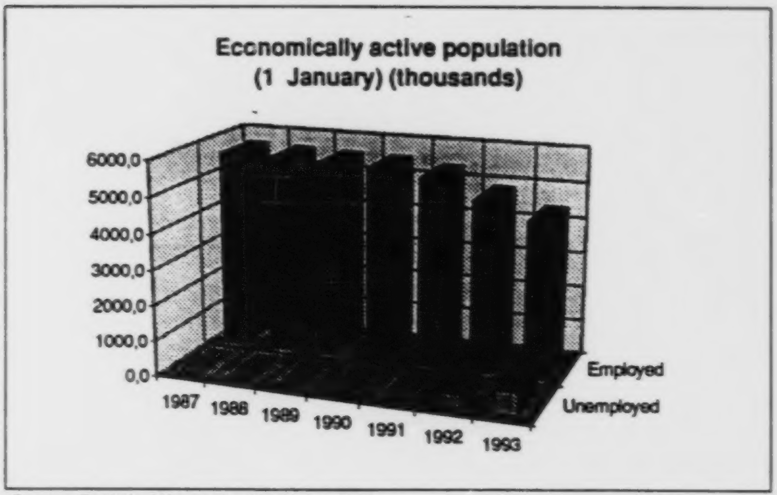
Table VII

Economically active population (1 January)

Year	Unemployed	Employed	Total	Rate of unemployment	Rate of activity
1987	6,4	5589,0	5595,4	0,1	85,5
1988	10,9	5548,5	5559,4	0,2	85,2
1989	14,2	5505,5	5519,2	0,3	85,3
1990	24,2	5471,9	5496,1	0,4	85,3
1991	100,5	5303,9	5404,4	1,9	84,0
1992	406,1	4796,2	5202,3	7,8	81,7
1993	663,0	4352,0	5015,0	13,2	79,5



Source: Statistical Yearbook of Hungary, 1993

The number of employed people in 1989 was 5,505,000; their number fell to 4,352,000 in 1993. The number of unemployed increased from 6,400 to 663,000 between 1987 and 1993. The activity rate, which was 85.5 per cent in 1987, dropped to 79.5 per cent in 1993. The rate of unemployment reached 13.2 per cent in 1993. The following table gives more information on the population and labour force in Hungary.

Table VIII. Balance of labour force (1 January) (thousands)

Population, active earners	1990	1991	1992
	Population		
Population under working age	2,130.5	2,063.7	2,009.8
Population of working age	5,956.8	5,997.4	6,031.4
Population at retirement age	2,287.5	2,293.7	2,296.0
Total	**10,374.8**	**10,354.8**	**10,337.2**
	Source of labour force by economic activity		
Economically active population	5,496.1	5,404.4	5,202.3
Inactive population at working age	945.5	1,012.6	1,133.3
Of which:			
students	483.0	519.5	547.6
pensioners	157.1	175.8	202.2
dependents	211.5	211.0	239.4

Source: Statistical Yearbook of Hungary, 1993

Although the population remained relatively stable between 1990 and 1992, the economically-active population has decreased dramatically, by 14 per cent. This is partly due to the baby boom, which means that the number of pupils has increased by 13 per cent, and partly due to the fact that many people retired before the normal retirement age to alleviate the stress on the labour market. The number of people who retired early increased by 28 per cent. The increasing rate of unemployment, together with the decreasing rate of activity, shows that a decreasing section of the population must support an increasing part of the population, which serves to weaken the sense of solidarity in society.

As for the juvenile labour force, between 1989-1992 more than the one-third of the school-leavers left school without any qualification. This reached a peak in 1990-1991, when 40 per cent of school-leavers left school without any qualification while the situation in the labour market was declining. It is clear that a huge number of the baby boom children could not enter secondary-type schools giving any qualification, which resulted in the increasing proportion of unqualified school-leavers. This has been an important issue in recent years, but now the decreasing number of enrollable pupils is threatening schools at primary and secondary level.

Table IX. Source of juvenile labour force (Thousands)

Source of labour force	1989	1990	1991	1992
Completed studies at third-level institutions	16.1	16.2	16.9	17.1
Completed secondary school or dropped out of third level institutions of which:	26.3	38.3	37.2	41.9
completed general secondary school	8.2	14.6	12.6	17.1
completed secondary vocational school	17.8	18.9	19.3	22.4
completed technicum	0.3	4.8	5.3	6.4
Passed skilled worker's examination	50.5	51.6	55.4	63.0
Completed other specialized secondary school	4.0	4.2	4.9	5.6
Completed primary school and didn't continue learning or dropped out of secondary school	37.3	41.4	40.7	35.0
Didn't finish primary school, reached the age of 16	8.4	10.3	12.4	10.0
TOTAL	142.6	162.0	167.5	172.6
Of which:				
skilled	88.7	95.7	101.8	114.5
unskilled	53.9	66.3	65.8	58.1
proportion	**37.7**	**40.9**	**39.3**	**33.7**

Source: Statistical Yearbook of Hungary, 1993

In connection with employment we should consider unemployment as well. Unemployment is quite a new phenomenon in Hungary, and means that the last bulwark of the Kádár era – full employment – has been lost. The first data on unemployment appeared in 1987, when the number of unemployed was only 6,400. But this number increased very rapidly, as shown in table VII. The following table shows that the less qualified have a greater chance of becoming unemployed.

Table X. Unemployed and employed persons by their highest educational qualification

The highest educational qualification	unemployed	employed
Less than 8 grades of primary school	4.6	1.6
Primary school	36.0	23.9
Vocational training school	34.6	29.2
Secondary school	21.3	30.5
High school, university	3.5	14.8
TOTAL	**100.0**	**100.0**

Source: Monthly Bulletin of Statistics, 1994/5

If we consider the figures of demographic flow as well as the figures of production and of the juvenile labour force and unemployment and the strong link between being unqualified and being unemployed, one could conclude that young people are at risk in Hungary.

Unfortunately, we do not have clear picture on this subject. We have figures about the rate of youth unemployment. According to the TARKI (empirical research institute for social sciences), based on a representative household survey, the rate of youth unemployment is 50 per cent. According to the Central Statistical Office the rate of unemployment is around 30 per cent among teenagers, and approximately 20 per cent among 20 to 24 year olds. According to the Central Labour Office (whose figures are based on registered unemployment and not on a representative survey), the number of registered unemployed was 593,000 in April 1994, of which 9,700 were under 17 years, 62,000 were between 17 and 20 years, and 81,000 were between 21 and 25 years. This means that one-quarter of the registered unemployed were under 25 years of age.[2]

The number of school-leavers among the registered unemployed began increasing from the second half of 1992 and quickly reached roughly 55,000.

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[2] Unemployment benefit for school leavers has existed only since 1 May 1991. It can be given only to those with some qualification. Unqualified young school-leavers (more than one-third of all school-leavers) are not interested in registering at the job centres, since they are not entitled to unemployment benefit and there are very few job opportunities for them. That is why the figures of Central Labour Office on youth unemployment were lower than the figures of other institutes who conducted representative surveys. The situation has changed slightly, as more and more unqualified school-leavers register at job centres. On the one hand, they are motivated by the rapidly-developing retraining facilities, and, on the other, it is possible that the black market might be offering fewer chances to work than before. As this paper is concerned with vocational education, especially in vocational training schools, the statistics of the Labour Centre on qualified unemployed school-leavers offer useful information on the effectiveness and quality of vocational education.

Table XI. Graduates and unemployed school-leavers in 1992-93 by their highest educational qualification[3]

Level of education	Number of school-leavers graduated in 1992 on secondary or higher level	Percentage of graduates from different educational levels compared to the total number of school-leavers *(in percentage)*	Number of unemployed school-leavers in April 1993	Percentage of unemployed school-leavers according to the educational levels *(in percentage)*	Unemployment rate of school-leavers by educational levels
University, college	17,100	13	2,000	4	12
Grammar school	13,100	10	10,000	19	76
Secondary vocational school	28,800	23	11,000	20	38
Vocational training schools	68,600	54	31,000	57	45
Total	**127,600**	**100**	**54,000**	**100**	**42**

Sources: Statistical Yearbook of Hungary, 1993 and Labour Market Information, 1993/1

To determine the chances for young people to get a job, I combined the data of the youth labour force in 1992 and the data on unemployed school-leavers in April 1993. Since school-leavers having secondary or higher type of educational qualifications can get their unemployment benefit three months after applying for it, and it can be given for them for 6 months, I assumed that the number of school-leavers in 1992 and the number of unemployed school-leavers in April 1994 can be compared. School-leavers usually look for jobs in the summer and applied for unemployment benefits at the end of the summer. They can get the first unemployment benefit three months later, in November-December, for not more than 6 months. So it can be said that the registered number of unemployed school-leavers can be roughly compared to the number of school-leavers in 1992. (I would like to stress here that these data do not include school-leavers who finished only primary school or less, a group which is probably the most disadvantaged group in the labour market.)

One can see from the table that 42 per cent of the school-leavers with baccalaureate and/or any qualification in 1992 did not find a job after school – 54,000 out of 127,000 school-leavers remained without jobs. If we look at the different level of educational qualifications we see that those who have a higher degree or graduated from a secondary vocational school are in a more favourable position. While the proportion of the school-leavers with higher degrees is 13 per cent among the total number of school-leavers, their proportion is only 4 per cent among the unemployed school-leavers. As for the school-leavers who finished secondary vocational school, their proportion is 23 per cent among the total number of school-leavers, but only 20 per cent among the unemployed school-leavers. Those with a skilled workers' certificate are in a less favourable position. While 54 per cent of the school-leavers came from vocational training schools, their proportion is higher - 57 per cent - among the unemployed school-leavers.

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[3] This table does not contain the figures of the school leavers who have finished 8 grades or less of primary school since the Labour Centre has data only on those unemployed school leavers who have secondary or higher educational qualification due to the practice of registering (see the previous footnote).

The data on the school-leavers of grammar schools show that while the proportion of school-leavers of grammar schools was 10 per cent out of the total number of school-leavers, the proportion among the unemployed school-leavers was 19 per cent. This also means that 76 per cent of the school-leavers from grammar schools in 1992 (10,000 pupils out of 13,100) could not find jobs after finishing school. This might suggest that having some vocational qualification is better that not having any, but one must be cautious about coming to such a conclusion. On the one hand, the 'royal way' of education leads through the grammar school to the university, which makes the choice to go to grammar school very reasonable. On the other hand, the flourishing post-secondary educational market has been devised for those having a baccalaureate. This post-secondary education can significantly improve this group's chances in the labour market. As for the other groups, the last column shows that in 1992/93 12 per cent of the school-leavers having some kind of diploma, 38 per cent of the school-leavers of secondary vocational schools and 45 per cent of the school-leavers of vocational training schools could not enter the labour market.

Fortunately, this picture can be refined with the help of the Labour Centre's follow-up survey among unemployed who left the register. The survey found that the qualified school-leavers had better chances of entering the labour market than older, or young but unqualified, people. One-third of the unemployed school-leavers getting off the register found a job, while 30 per cent of them remained unemployed and 38 per cent of them became inactive (joined the army or became students again). Among the unqualified young people, only 15 per cent found a job and 63 per cent remained unemployed. But it is interesting to note that among the qualified school-leavers, more than one-third of those having skilled workers' certificates could not enter the labour market. This shows that the content of this type of vocational education might be out-of-date and does not adjust structurally to the requirements of the labour market. It is true that Hungarian vocational education, being based mainly on large-scale industries, met with problems when it closed down the big firms. But, on the other hand, it was narrowly specialized. As for the concrete qualifications of unemployed school-leavers of the vocational training schools, data is available only for certain special occupations. Since we know nothing about regional differences, this data is not sufficient for drawing conclusions about which occupations are having too many pupils trained. The following table is interesting in this regard.

Table XII. The number of apprentices and the unemployed school-leavers in some professions concerned by unemployment

Profession	Number of apprentices in the last school year 1993	Number of unemployed school-leavers in March March 1993	Job openings March 1993
welder	781	645	586
turner	1,913	1,281	220
body ironer	1,880	1,012	140
motor mechanic	3,325	2,952	298
central heating and pipe mechanic	1,263	562	77
engine fitter	2,787	1,906	251
agricultural machine mechanic	1,270	728	67
hairdresser	1,279	520	47
house-painter	2,101	1,390	153
bricklayer	2,697	1,229	1,207
food shop assistant	3,708	1,267	420
waiter	1,019	616	399

Source: Jobless school leavers, Ministry of Labour, 1993

The position of motor mechanics seems to be the most difficult. This is interesting if we consider that this is one of the most flourishing trades trained by craftsmen. The training of hairdressers is also very popular but does not seem to give a 'free ticket' to the labour market either[4]. The relatively high number of unemployed school-leavers and the few openings for young turners, engine fitters and agricultural machine mechanics reflect the problems of the machine industry.

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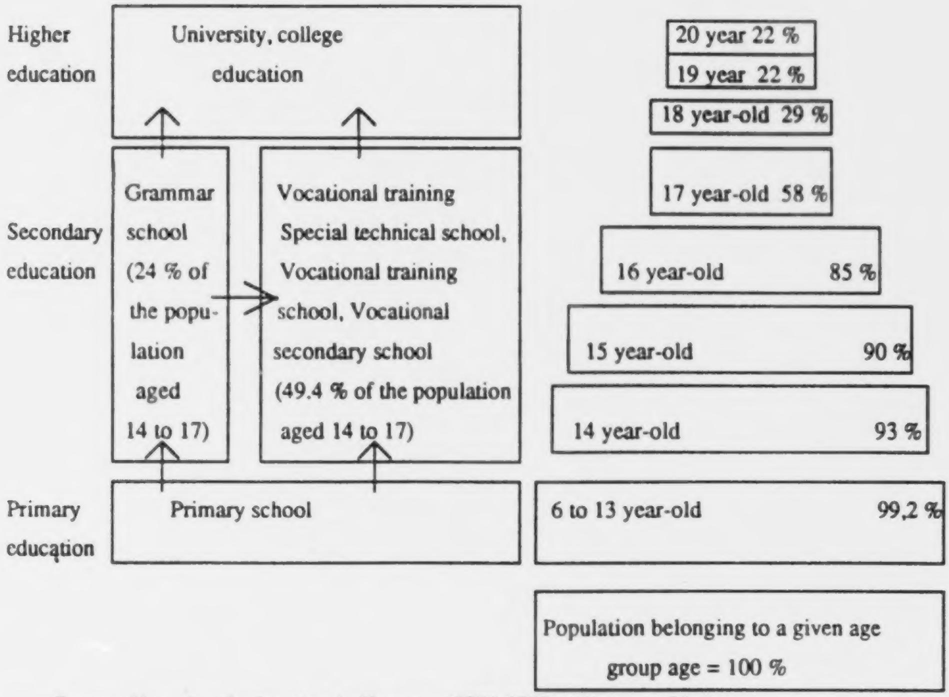
[4] The questions of individual training of craftsmen and IPOSZ (National Association of Craftsmen) classes will be considered later in this paper.

2. STRUCTURE OF THE VET SYSTEM AND CHANGES IN THE MANAGEMENT AND FINANCING SYSTEM

Before considering the changes in the legal framework, structure and financing of vocational education, I shall outline the structure of the Hungarian education and training system, and look at the management and financing practices of the 1980s.

Table XIII. The structure of the Hungarian system of educational institutions and the proportions of the students within it from among the population of the same age in 1992


Higher education
University, college education
Secondary education
Grammar school (24 % of the population aged 14 to 17)
Vocational training Special technical school, Vocational training school, Vocational secondary school (49.4 % of the population aged 14 to 17)
Primary education
Primary school
20 year 22 %
19 year 22 %
18 year-old 29 %
17 year-old 58 %
16 year-old 85 %
15 year-old 90 %
14 year-old 93 %
6 to 13 year-old 99,2 %
Population belonging to a given age group age = 100 %

Source: Vocational education in Hungary (1980-1992), Ministry of Labour

Primary education takes eight years for 6 to 14-year-old children. Until now pupils, after finishing primary school at 14, were tracked into grammar schools, secondary vocational or vocational training schools. This will soon change, as the new Act on Public Education extends the duration of primary education from 8 to 10 years. In harmony with the new Act on Vocational Education, vocational education can begin only at age 16. The Act calls for a compulsory basic examination at age 16. The Acts will not come into force until 1996, since a vital condition for it, the National Core Curriculum, is still missing. Moreover, the new government (elected in the summer of 1994 consisting of the previous socialist and liberal opposition), is not in favour of these acts and has promised to change them. As for developments in the school structure, the emergence of grammar schools with six or eight classes, in addition to the old four-class type, is a new phenomenon.

2.1 The structure of the VET system in Hungary

This section gives an overall picture of the structure of the Hungarian VET system, covering the different types of vocational schools. It also gives a short summary on how the system has been managed and financed up to now.

1. The *special technical schools*, based on primary education (for example, schools for typists or medical assistants) lasts two or three years. This type of school was created by the 1985 Educational Act for training children with slight physical and/or mental handicaps. The modification of this law in 1990 permitted healthy but disadvantaged pupils who were not able to enter other secondary schools to study in these schools. This kind of special school has increased more than fourfold since 1990 (from 65 to 289), since it was created to absorb the surplus children from the 'baby boom'.

Table XIV. Special technical schools for healthy children

Year	Number of schools	Number of pupils	Number of girls
1990	16	684	616
1991	125	6,062	4,913
1992	221	13,942	10,481

Source: Farkas: Changes in demography, labour market, financing, administration and educational policy influencing vocational education: sign of crisis, problems of co-ordination and suggestions, 1993

Most of the pupils come from socially disadvantaged families, many of them girls. The programmes offered to them focus on the textile industry, agriculture or housekeeping, but do not provide any qualification. They give two more years for *learning*, but the facts show that do not improve the chances in the labour market, especially since it offers neither baccalaureate nor any other certificate accepted by the labour market. Many attempts have been made to change the character of these schools, from a dead-end into a kind of orientating phase of education similar to the German *Berufsvorbereitungsjahr*, in which pupils can be rechanneled into the normal vocational education (Farkas, 1993). Since this form of training is not the main focus of vocational education, I shall put more emphasis on the following two forms of vocational education in this paper.

2. In most cases, *the vocational training school* (skilled workers' school, apprentice school) based on primary education lasts three years and trains in 223 trades. It gives a nationally valid skilled worker's certificate, but does not give a baccalaureate. Training is done in a kind of dual form. Before 1945, and until 1970, apprenticeship in craft and artisan trades was dominant, and the apprenticeship contract was not unknown in Hungary. But its significance was very small, since in the 1950s crafts and artisan trades disappeared and vocational education based on large-scale industries was developed. In the 1950s, the structure of Hungarian industrial vocational education was very similar to the German structure, whereby apprentices spent first one, later two or three days in school. But the training in Hungarian vocational training schools differs from the German model in that in

Hungary the schools are the dominant actors in vocational education, not the companies. The pupils who are trained in vocational training schools are practically apprentices, but they have student status. Recognizing that companies play a pivotal role, the schools made an agreement with the co-operating companies. In the late 1980s, 84 per cent of the capacities for practical training were in the hands of the firms in traditional training. Apprentices usually spent one week at school and one week at the firm. The situation has changed and the new Act on Vocational Education would like to recall the tradition, as we shall see later.

3. *Secondary vocational school* offering more general education gives baccalaureate and skilled worker's certificates (or a technician's certificate, which takes one or two more years) and prepares for further studies. This is one of the most popular forms of education today. This kind of vocational education is school-based, while practical training is less dominant than in the vocational training schools. There is more theory, and practical training is usually conducted inside in the school workshop[5].

The secondary vocational school is one of the most interesting types of Hungarian educational institutions, since it has developed out of the struggles of different lobbies. It was born in the early 1960s to educate skilled workers at the secondary level. This form of school was intended to achieve two objectives – on the one hand ideological-political, to open the way into higher education for all members of the society, and on the other, a rational one, linked to the economy. This type of school was later criticized for neither improving the chances of young workers to enter higher education nor providing pupils with marketable skills. In the late 1960s, experts criticized the expansion of secondary education for ruining the balance between the educational and economic systems. This criticism and the growing demand of extensive economic development for more manpower made the labour affairs lobby stronger than the educational affairs lobby and, during the 1970s, the Minister of Labour was responsible for managing skilled workers' education. This led to the reorganization of secondary vocational schools by introducing elements of skilled workers' training (apprentice training). The expansion of the labour lobby ended in the late 1970s, when the structural tensions in industry and the need for changing its structure decreased the expansion of overspecialized skilled workers' training and made the expansion of general education more desirable (Halász, 1988). The Ministry of Labour was abolished in the early 1980s and the responsibility for vocational education was moved to the Ministry of Education, resulting in fewer developments in content and methods of vocational education. Practical training was henceforward determined by the interests of out-of-date production. At the end of the 1980s the recession, the change of the political system and the increasing number of pupils due to the mid-1970s baby boom put vocational education at the centre of interest.

The Ministry of Labour has been set up again, and is responsible for vocational education. The question of more general education versus more vocational education has always existed in Hungarian educational policy. The developments in the educational system were always determined by the interests of the different interested lobbies and by the state of economy as well as by the interests and inertia of the educational institutions. (For example, it is much easier to establish an institute than to get rid of it.)

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[5] Practical training was usually performed at firm workshops in vocational training schools and at school workshops in secondary vocational schools. At both places, these workshops were designed for training and not for production. On the other hand, the flourishing individual form of training of craftsmen is a kind of on-the-job training.

There are now three types of secondary vocational school in Hungary. One is secondary vocational school, with elements of skilled workers' training, where practical training is very similar to the practical training performed in vocational training schools, but lasts one year longer, that is, four years. These schools are specialized in manufacturing or agriculture. By offering a baccalaureate, they also theoretically prepare pupils for higher education, but practically speaking, the graduates of this type of school do not continue their studies after finishing school; if they try they usually fail at the entrance examination of the higher educational institutions.

The other type of secondary vocational schools offers secondary type of education. These schools are specialized in commerce, catering, economics and health and are very similar to grammar schools. Most of the pupils are girls. This type of school offers better chances for entering higher education.

The third type of secondary vocational schools is the engineering school, established by the Educational Law in 1985 to offset the dominance of the secondary vocational schools with elements of skilled workers' training. These schools are specialized mainly in mechanics, chemistry and biology and, besides a baccalaureate, also offer a technician's certificate. The aim of this type of school is to provide the labour market with works managers.

The following table shows the development of the number of pupils in vocational education according to the type of school, and gives information about their proportions.

Table XV. Number of pupils in the several types of vocational schools

Type of school	1980/81	1985/86	1990/91	1991/92	1992/93
Engineering secondary vocational school	..	7,104	50,266	52,540	54,076
Secondary vocational school of secondary type	81,261	80,493	81,226	86,980	91,359
Secondary vocational school having the elements of skilled workers' training	32,450	42,558	36,860	39,391	40,748
Secondary vocational schools TOTAL	113,838	130,310	168,445	178,973	186,225
Vocational training school	154,096	176,380	209,371	204,655	188,570

Source: Vocational education in Hungary, Ministry of Labour,1993

The new developments in education are determined by a variety of interests. It is interesting to note that the idea of the ten-grade primary school, one of the greatest changes implemented by the new Educational Law, is not new. Efforts were made in the early 1970s to extend primary education, but this idea was rejected by the various actors in the field. Both the educational affairs lobby and the labour affairs lobby considered this kind of school a threat to their power. They were afraid of losing their bulwarks in secondary education. The situation has now changed. On the one hand, the introduction of ten-grade primary education does not imply the setting up of a new institution. This means working out a basic core curriculum for the first ten years of schooling, and the various educational institutions must elaborate their curriculum for the corresponding age groups accordingly. So the structure of education remained, since this change does not threaten the already existing schools. (The decreasing number of students and the ailing economy seem to be the real danger for schools.) On the other hand, the extension of general education gives primary and vocational training schools a good chance to expand as well, and obtain as many students as they can. Those who are not satisfied with the Act are expecting the new government to change it. The situation in the 1990s differs from the previous periods in that power is more decentralized and partners with different interests have to compromise.

As we have seen, since the 1960s the Ministry of Education and the Ministry of Labour have been alternately responsible for vocational education. Both secondary vocational education and general education were financed through the State budget. The educational institutions were maintained by the councils, which were national and local organs operating in a bureaucratic and centralized way. The money they received for financing schools was planned at the county levels. The budget of these councils depended on the State budget; the amount of State support given to the councils was regulated by the plan, but the council could decide how to spend the money. The basis for the amount was determined by the previous year's amount and by their success in the bargaining, but not by the tasks to be fulfilled. This system has also totally changed, since in 1990 the councils were succeeded by the new self-governments, which are municipalities. The self-governments are politically independent from the State; demonstrated by the fact that the opposition had been elected to the leading posts. They receive money from the State for specific uses, but they also have their own financial resources. Since providing public education is still the role of the State, self-governments are also given State support, but through a 'normative' system, which means for specific uses.

The aim of this paper is not to analyze the past but rather to find out what is happening at the moment in the field of vocational education, especially in vocational training schools. After this brief description of the management and financing practice of the previous twenty or thirty years, in the following section I would like to show how the legal framework and the structure and the financing system of vocational education have changed at the beginning of the 1990s.

2.2 The changing legal framework

Since 1988, during the transition period, many changes have occurred concerning the management of vocational education. The first step was the modernization of the already-existing *Fund of Vocational Education* in 1988. The Act on the contribution of companies to vocational education and the Fund created a new form of distribution of responsibility between the State and the economy. This is one of the first methods of financing which more or less conformed to the principles of a market economy.

The *Ministry of Labour* was established in the summer of 1990 (previously there was a State Office of Labour and Wages), which shows the growing importance of vocational education, as well the growing fear of unemployment (which has begun to grow rapidly this year). The Ministry of Labour is responsible for vocational education and, together with the Ministry of Education and the other Ministries concerned with training, has authority over it.

The Ministry of Education is responsible for general education, and thus for the general education provided in vocational schools. In addition, it transfers money from the State budget to the self-governments that maintain vocational schools. This money is a strictly determined quota differing according to the types of school (see *Table XXIV*). This is a purely administrative task of the Ministry of Education. In addition, the Ministry of Education covers some trades (such as music teachers and secretaries at the secondary level), for which it is responsible for the content of training. This is the only field which is really connected to vocational education, but since these trades represent only a very small proportion of the other trades, the Ministry of Education in fact has little power in determining vocational education.

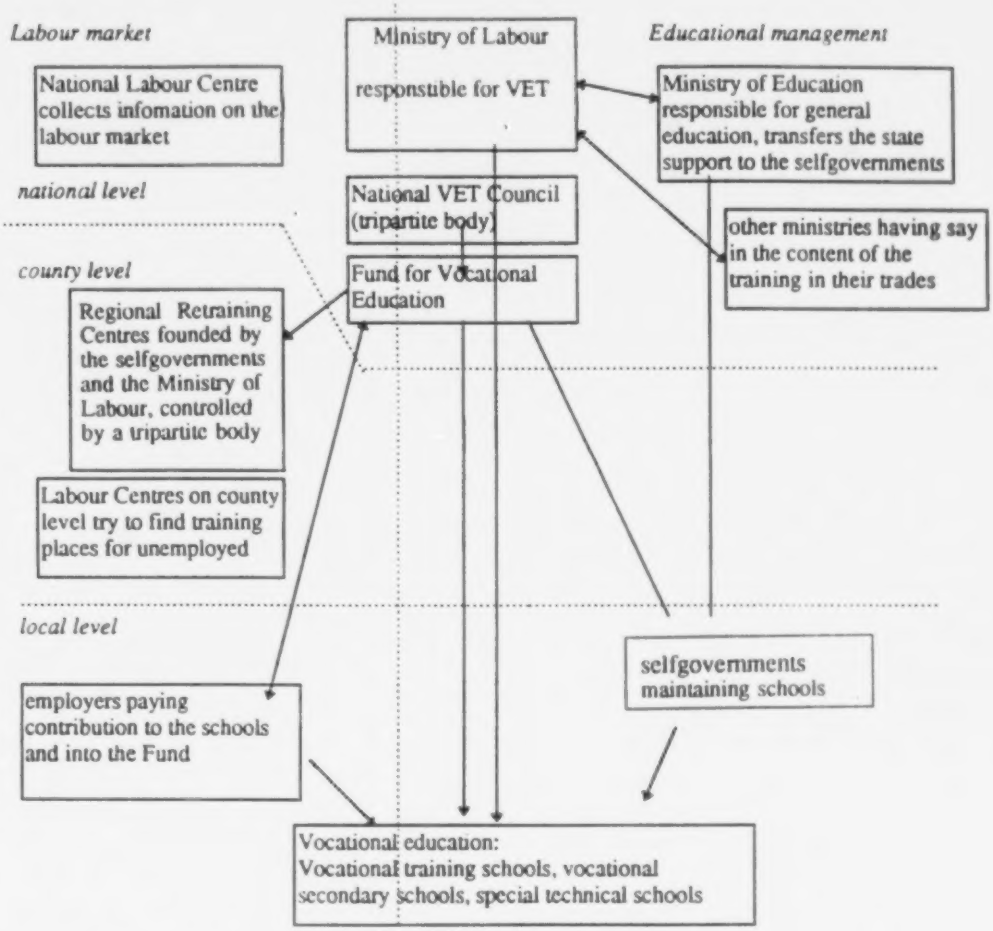
The Ministry of Labour issues the List of Trades (a list of trades for which training is needed), determines the requirements and controls the content of training. It is a strongly centralized institution, which seemed at first to be necessary, when the economy was weak, but as we shall see, because of its dominant role, it now hinders the establishment of real tripartite forums.

The council system was abolished by the end of 1990 and the self-governments were set up. The difference between the previous local councils and the *self-governments* is that the latter are politically independent from the government. Most of the primary and secondary schools are maintained by them (they also maintain more than 90 per cent of secondary-type schools). As they maintain 93 per cent of the vocational training schools, the self-governments are one amongst the most important actors at the local level. They can establish or close down schools, appoint the headmasters and provide State financing (see more about them in section 2.4 on financing).

In 1991, the *National VET Council* was established as a subcommittee of the 'Conciliation Council'. This is a tripartite forum where the employers' and employees' organizations are included in decision-making. They have monthly sessions which are open to the public. This forum has authority over the distribution of the Fund of Vocational Education. I conducted several interviews with its members, as it is a relatively new institution in Hungary and its operation and the problems arising from it illustrate the critical points in the management of vocational education. (See more on this subject in the following section).

Table XVI.

Management and financing of the Hungarian VET system


Labour market
Ministry of Labour responsible for VET
Educational management
National Labour Centre collects infomation on the labour market
Ministry of Education responsible for general education, transfers the state support to the selfgovernments
national level
National VET Council (tripartite body)
other ministries having say in the content of the training in their trades
county level
Fund for Vocational Education
Regional Retraining Centres founded by the selfgovernments and the Ministry of Labour, controlled by a tripartite body
Labour Centres on county level try to find training places for unemployed
local level
selfgovernments maintaining schools
employers paying contribution to the schools and into the Fund
Vocational education: Vocational training schools, vocational secondary schools, special technical schools

The Act on Vocational Education, which was passed by Parliament in July 1993, is a milestone in the history of Hungarian vocational education. I would like to stress its two main features. Firstly, it involves more enterprises in training activities. As shown previously in this paper, the economic context has made it increasingly difficult to ensure the conditions for practical training. Although the Law on Education, passed in 1985, guaranteed the conditions for practical training, the State could not fulfil them. The State placed the burdens on enterprises without giving them any significant role in decision-making. That is why the economic organizations were (and still are) so reluctant to take part in training. It is considered a burden without rights. The new Act attempts to moderate this tension and clarify the responsibilities between the State and the economy. Teaching theory is the responsibility of the educational institutions, while practical training falls to the enterprises. A new element in the Act is the apprentice contract between the economic organization and the apprentice, under which the economic organization is responsible for all the practical training. The apprentice can be enrolled in the school with this contract, which is necessary if the school cannot provide enough places for practical training. But this is only a new possibility, and does not mean the abolishment of the previous school-based system. Only those economic organizations which are members of the Chamber will be allowed to contract with apprentices and take part in training. The problem is that the *Act on Chambers* was passed after the Act on Vocational Education and will not be effective until 1996 or later. The fact that no real Chambers exist now increases the uncertainty. Meanwhile, limited liability companies providing education and training are mushrooming around the country – according to a representative of the Ministry of Labour there are now 5,000 of them. Many of them exploit the chances offered by the transitional situation, and make large profits by using apprentices for productive work. Because of the imperfect flow of information they often offer courses which are not marketable.

Although the private sector is developing and the private entrepreneurs already had 35,000 apprentices in 1993, there are trends in practical training which are contradictory to the spirit of the Act. The real economy is not strong enough to take on the burdens of practical training, so the State has had to intervene and, with the help of the central budget and the generous support of the National VET Council, rescue the workshops, giving interest-free credit to the self-governments. But this led to a situation where there were more and more workshops at school and fewer at firms. Instead of getting closer to the market, the local authorities and the government seem to become more and more dominant in vocational education.

The other main feature is the objective of expanding education, which is in harmony with the new Act on Public Education. This extends the duration of compulsory education from eight to ten years. The Act on Vocational Education shifts the age for choosing a career from 14 to 16 years.

But some basic conditions are missing to enforce the acts. First of all, the National Core Curriculum has not yet been prepared. Grammar schools try to catch up with the changes and are establishing six or eight classes instead of four.

The future of vocational training schools is more obscure. Will they teach in the first two years only general academic subjects and concentrate practical training in the third and fourth year? Or will they become a part of the labour market, offering training for adults as well? Some of them are just waiting, hoping that the new government will invalidate the Act of the previous parliament. The more practical schools are trying to adjust to the new requirements. Before going into further detail in the next section, I would like to mention two experiments in the field of vocational education.

The first experiment is a World Bank project to develop secondary vocational schools. This is in harmony with the spirit of the new Acts, since it introduces the ten-class primary school by shifting strict vocational education to the third year. Besides general education there is orientation in the first two years. In the third and fourth years, the pupils are given broad basic training in 13 professions in addition to preparation for the baccalaureate. They will be specialized only in the fifth and sixth year. At first 61 secondary vocational schools entered the programme; now 21 others have followed.

The other development programme in vocational education is taking place in the field of crafts trades, under the leadership of the National Association of Craftsmen (IPOSZ) and the National Institute of Vocational Education. Curricula were developed in eight trades (such as motor mechanics and hairdressing). Today there are more than 80 so-called IPOSZ classes, and according to estimates, 35,000 apprentices are being trained by the craftsmen.

The Act on Chambers, which was passed several months after the Act on Vocational Education, will restructure the employers' organizations. The Act gives newly established chambers the right to decide where the training of masters can be performed and to work out its conditions and ensure their fulfilment. They will take part in the examinations committees granting qualifications according to the National List of Trades. They will control whether the employers and practical teachers undertaking training live up to expectations and will supervise them. They will register and endorse apprentice contracts. Chambers will be professional organizations and membership will be obligatory. They are not allowed to pursue any activity which involves representing interests; there will be separate organizations for that purpose. The Act is similar to the German model, but during the transition period, until the chambers are set up, the Minister of Labour replaces the chambers in the field of vocational education.

2.3 The changing school structure

The following table gives information on how the structure of secondary education has changed.

Table XVII. Changes in the number of institutions of secondary education between 1990-1992 *(excluding training schools for medical assistants and typists)*

School year	Grammar schools	Grammar and secondary vocational schools	Secondary vocational schools	Vocational training schools	Special technical schools	Number of vocational institutions
1990/1991	214	107	406	308	65	979
1991/1992	233	125	422	317	189	1,145
1992/1993	251	145	428	329	288	1,276
Basis: 1990/1991	117.3	135.5	105.4	106.8	443.1	130.3
Distribution 1992/1993	16.4	9.5	28.0	21.5	18.9	83.6

Source: Vocational education in Hungary, Ministry of Labour, 1993.

The number of institutions of secondary education has been increasing in the last few years, as has the proportion of vocational schools. This tendency is due to the baby boom, and to the special technical schools, which are rapidly growing in number. The joining of grammar and secondary vocational schools seems to be very popular. If six- and eight-class grammar schools is a way of increasing selectivity, because the most talented children from the primary schools are picked out very early, the phenomenon of fusing several types of schools can be a means towards comprehensive education, and thus a way to lessen selectivity. Not only are grammar schools and secondary vocational schools merging, but 75 per cent of the vocational training schools are maintained together with a secondary vocational school (Liskó, 1994). Both the tendency towards selectivity and comprehensiveness now exist in the Hungarian educational system, and the motive for both tendencies is the fear of the decreasing number of enrolments due to the demographic slope now reaching primary schools. Schools try to find out how to make themselves popular, because they might be closed down if they have too few children. The answer to the question of which path the Hungarian educational system will take depends greatly on the educational policy of the government.

The following table shows how pupils having finished primary school continued their studies between 1980-1992 in this type of school.

Table XVIII. Proportion of pupils continuing their studies after primary school between 1980-1992 *(excluding training schools for typists and medical assistants)*

Year of finishing primary school	Successfully finished the eighth class of primary school	Proportion of pupils continuing their studies after primary school				
		Total	In grammar school	In secondary vocational school	In vocational training school	In special technical school
1980	119,809	93.1	20.3	26.0	43.8	..
1985	130,992	93.6	20.8	26.0	43.8	..
1990	164,616	93.8	21.1	27.5	42.0	0.4
1991	158,912	94.2	21.6	28.9	39.2	2.3
1992	151,295	95.7	23.3	30.1	36.6	3.9

Source: Vocational education in Hungary, Ministry of Labour, 1993

In the eighties, the rate of continuing studies was stagnating. Only the last few years show a slight shift toward more general schools, such as grammar schools or secondary vocational schools. As for vocational training schools, we can see that they are becoming less and less popular due to the difficulties of getting a job with a skilled workers' certificate. But, nevertheless, 36.6 per cent of the 14-year-old school-leaver population began their further studies in 1992 in their type of school.

It would be interesting to examine whether the decreasing enrolment in vocational training schools led to any significant structural changes. In spite of the fact that the total number of pupils in vocational training schools between 1990 and 1992 decreased by 10 per cent (to 21,000 pupils), the distribution of pupils among trades has changed only slightly. We found the same to be true in the case of the sectors of the economy, which shows that the structure of the economy and of traditional vocational education changes very slowly. There is inertia and resistance due to institutional interests in these systems, especially in schools.

Table XIX. Number of pupils in vocational training schools and the changes of their sectoral distribution between 1980-1992

Sectors	1980/81	1985/86	1990/91	1991/1992	1992/1993
Industry	59.1	57.9	57.5	56.9	57.7
Construction	10.3	11.5	11.3	11.5	12.3
Agriculture, food industry	8.4	8.5	8.9	8.6	8.1
Service	3.6	4.2	4.3	4.9	6.0
Commerce, catering	18.4	17.5	17.2	16.4	15.3
Transportation, telecommunication	0.3	0.4	0.6	0.7	0.6
TOTAL	100.0	100.0	100.0	100.0	100.0
Number of pupils	154,096	176,380	209,371	204,655	188,570

Source: Vocational education in Hungary, Ministry of Labour, 1993

The total number of apprentices peaked in 1990/91 due to the demographic boom. After that, the number of pupils began decreasing gradually, but distribution among the economic sectors has not changed significantly. In the 1992/93 school year, enrolment declined in the machine industry, the textile industry and in the cultivation of plants and commerce (Fejes, 1994).

As we have seen, the external efficiency of vocational training schools seems to be low, in view of the great number of young unemployed with skilled workers' certificate. But the drop-out rate, as the indicator of internal efficiency, is also an important factor.

Table XX. Drop-outs in the vocational training schools between 1980-1992

First year in vocational training school	Third year in vocational training school	Number of first class students in the first year	Number of third class students in the last school year	Drop-outs during the three years	
				number	%
		58,208	1978/79	1980/81	27.2
1983/84	1985/86	68,200	51,098	17,102	25.1
1988/89	1990/91	77,247	56,223	21,024	27.2
1989/90	1991/92	80,239	61,956	18,283	22.8
1990/91	1992/93	77,192	59,520	17,672	22.9

Source: Vocational education in Hungary, Ministry of Labour, 1993

The drop-out rate in vocational training schools has been improving since 1992, but is still high compared to the 17 per cent drop-out rate in the secondary vocational schools, or the 13 per cent drop-out rate in the grammar schools. The reason for the high drop-out rate in vocational training schools in the 1980s was the low motivation of the pupils. Those who could not enter grammar or secondary vocational schools ended up in these schools, or entered the relatively modest labour market, where unqualified people could get jobs easily.

Another reason is the worsening teaching conditions. While the number of apprentices increased from 154,096 to 209,371 (36 per cent) between 1981 and 1990, the number of teachers in vocational training schools increased by only 3 per cent. The situation has improved since 1991 because although the demographic boom put pressure on these schools, the less talented pupils could not enter even the vocational training schools. They went to the special technical schools or simply stayed at home. So there were more opportunities for selecting pupils. On the other hand, the labour market has changed. It no longer absorbs the unqualified labour force but, rather, needs qualified people with new skills. With privatization and the development of small-scale entrepreneurs, trades which offer a chance to enter the private sector (service, commerce, catering, transportation) became more popular.

Table XXI. Drop-out rates of student of vocational training schools by sectors

Economic sector	School year		
	1990/91	1991/92	1992/93
	Drop-out rate (percentage)		
Industry	28.0	23.2	23.4
Construction	30.1	29.8	30.2
Agriculture and food industry	27.6	28.0	29.4
Service	43.0	15.6	15.3
Commerce and catering	18.3	14.5	12.8
Transportation and telecommunication	39.7	17.5	22.9
	27.2	22.8	22.9

Source: Vocational education in Hungary, Ministry of Labour, 1993

The greatest shock for vocational education, especially for apprenticeship training, was the collapse of large-scale industry, which resulted in closing down the workshops in factories. Workshops sometimes had to be closed even in the middle of the school year, and many apprentices remained without any place for learning practice. However, the vocational education and training system did not collapse. Although the economy was in a crisis, the State came to the assistance of the struggling training institutions. The State gave money and created funds to help schools and self-governments buy out the workshops of the companies. This alleviated the crisis of vocational education and training, but resulted in an increasing number of school workshops, which seems to be inconsistent with the new Act, which tries to involve more employers in training. But, with the revival of crafts and artisan trades in the private sector, there are more and more apprentices with these craftsmen. For example, in 1992 the largest group of the apprentices (32.9 per cent) was trained individually by craftsmen.

The secondary vocational schools are working under more favourable conditions, as they are not as dependent on the economy. Practical training places in these schools have been increasing gradually since the eighties.

Table XXII. Data on workshops in vocational schools

Type of school		1990/91	1991/92	1992/93	1992/93 in the percent of 1990/91
		school year			
Secondary vocational schools					
Number of secondary vocational schools having workshops		246	225	274	111.4
Number of the workshops		1078	1139	1223	113.5
Places for getting work experience		30010	33081	35948	119.8
Vocational training schools					
Number of vocational training schools having apprentice workshop	at school	167	203	242	144.9
	at firm	270	268	264	97.8
Number of workshops	at school	941	1,142	1,453	154.4
	at firm	3,039	2,718	2,304	75.8
	total	3,980	3,860	3,757	94.4
Number of places in workshops	at school	17,885	22,827	28,375	158.7
	at firm	52,338	46,710	40,607	77.6
	total	70,223	69,537	68,982	98.2
Workshop places per 1000 apprentices in vocational training schools	at school	537	570	612	114.0
	at firm	629	672	778	123.0
	total	603	635	700	116.1

Source: Summary on the situation of vocational education in the 1992/93 school year, Review of Vocational Education, 1993.

The number of workshops in secondary vocational schools increased by 13.5 per cent between 1990-1992 (which is almost the same rate of growth - 14.4 per cent - as between 1980-1990). Today there are 1,223 workshops in 274 secondary vocational schools. The places for practical training in the 1980s increased by 33 per cent. In the last three years their number multiplied by 20 per cent - there were 36,000 in 1992.

The number of workshops in vocational training schools decreased from 3,980 to 3,757 between 1990-1992. The changes in the number of places for practical training provide more information. Between 1980 and 1990 the number of these places rose by 26 per cent, from 55,900 to 70,220. Over the next three years this number declined, especially at firms, where the places in workshops between 1990-1992 fell from 52,300 to 40,600. This decrease was more or less compensated by the increase in the number of places at school workshops (which increased by 59 per cent over the three years). The number of places per 1,000 apprentices has increased since 1990, due to the decrease in the number of pupils and also the measures taken by the government to protect and support workshops. But this number (700 in 1992) is lower than during the 1980s, when it was 800.

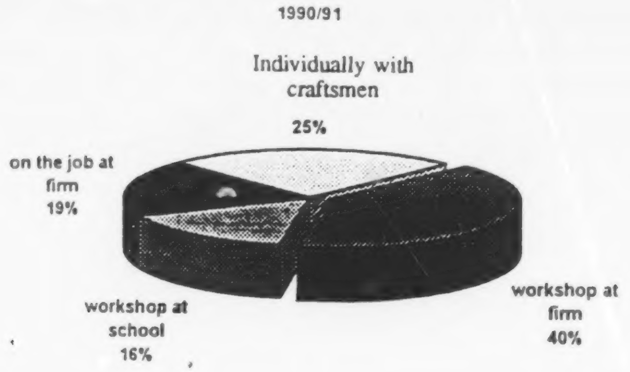
Table XXIII. Changes in number of apprentices according to the place for practical training

		1990/91	1991/92	1992/93	%
At school workshop	Number of apprentices taking part in practical training	33,300	40,040	46,337	139.2
At firm workshop		83,225	69,506	52,178	62.7
On the job at larger and medium size firms in groups		40,216	33,923	28,099	69.9
Individually (with craftsmen, other)		52,630	61,186	61,956	117.7
TOTAL		**209.371**	**204.655**	**188.570**	**90.1**
Of which: At school workshop	Proportion of apprentices taking part in practical training	15.9	19.6	24.6	..
At firm workshop		39.8	34.0	27.7	..
On the job at firms		19.2	16.6	14.9	..
Individually		25.1	30.0	32.9	..

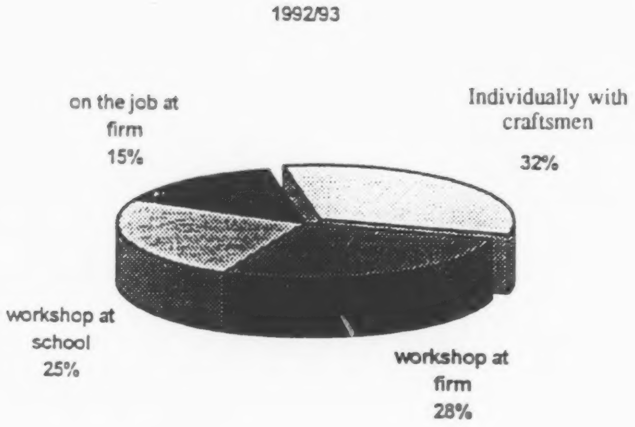
Source: Summary on the situation of vocational education in the 1992/93 school year. Review of Vocational Education

Proportion of apprentices taking part in practical training according to its location

Figure



Figure



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As we can see, the structure of the practical training has changed, the apprentices trained in a school workshop and individually with a craftsman increased significantly and, at the same time, the role of firms in practical training has decreased.

2.4 Changes in financing

Besides demographic changes and the problem of providing places for practical training, one of the most critical issues is the financing of vocational education. At the end of 1990, the self-governments (municipalities) were set up, replacing the council system under which councils received their money from the central budget on the basis of planning. Since 1990, self-governments, in most cases maintainers of primary and secondary schools, have received State support (the so-called 'normative system', which gave a fixed amount per pupil) as well as other earmarked support, but bargaining, a characteristic feature of the previous years' financing practice, has not disappeared.

The financing of educational institutions has more sources, the most important being the central budget from which the maintainers, usually self-governments, get money in proportion to the number of pupils in the institutions under their authority. However, this support does not cover the real expenses. The self-governments have to complete this amount with money from their own budgets. But, as there are great differences between self-governments, they cannot equally shoulder this responsibility. Moreover, their budgets had been cut by the State. Now they only get 30 per cent of the personal incomes in their territory instead of the previous 50 per cent.

Another problem is that, in the case of vocational education, the costs do not depend only on the number of pupils, but also on the number of classes, the size of the building, the type of trade they are specialized in and the place of practical training. That is why the local self-governments often prescribed that schools should generate their own incomes. This is allowed if it does not hinder the basic activities of the school; and if the profits are invested in education, it cannot be taken away from the schools.

Since the Act on Public Employment was passed, the salaries of public employees (like teachers) are regulated. But, since the Act on Public Education is not yet effective, salaries are financed from money received in proportion to the number of pupils, which makes the situation quite difficult and mixes the principles of financing.

There are more sources for financing vocational education, such as the several funds, foundations, earmarked support and direct support from companies. The most important fund is the Fund for Vocational Education, which has existed since the mid-1970s, when the enterprises paid 0.2 to 0.35 per cent of their payrolls into the Fund. This money was spent on setting up workshops and on scholarships for apprentices. The new Act of Fund for Vocational Education was passed by the parliament at the end of 1988. The industrial organizations must pay 1.5 per cent of their payroll; agricultural organizations pay 1 per cent. If the organization takes part in training, then some costs can be discounted. If the costs of training are higher then the compulsory payment into the fund, the surplus can be claimed back.

According to the modification of the Act in 1990 the compulsory contribution to vocational education can be fulfilled in three ways:

- by taking part directly in training, buying necessary equipment for training in groups;
- by supporting practical training of any vocational school of secondary-type having workshops (75 per cent of the obligation can be performed, 25 per cent of it must be paid directly into the fund); or
- by direct payment into the Fund.[6]

The value of the total sum of the contributions to vocational education can be five to six billion Fts, about two billion of which go to the Fund for Vocational Education (Benedek, 1994). Firms prefer to pay directly to the schools, because they can control how the money is used, and can take advantage of the services offered by the school. Many firms tried to fulfil this obligation by donating their old machines to the schools, but schools today prefer to be paid in cash.

To save the workshops of bankrupt companies, the self-governments have the option of buying them from the firms. To do this, they are provided with an interest-free loan from the Fund. The price of these workshops was naturally reduced by the sum that was spent on it from the Fund. The school maintainers managed to buy 5,000 training places in 1992 with this money (Farkas, 1993). It is interesting to note that a huge amount of money has to be allocated for supporting the National Institute of Vocational Education, which is a research institute of the Ministry of Labour.[7]

The law seems to favour the workshops that are run as a kind of enterprise at corporations which have a legal status, because they can get the equivalent of the costs of basic training of the apprentices of vocational schools from the Fund. As we shall see, this causes problems, because these kinds of training enterprises can gain unfair profit by financing their costs from the Fund, using the cheap labour of apprentices, and then selling or offering services under the market price. Those private entrepreneurs and craftsmen who pay personal income tax are not entitled to take advantage of the options offered by the Fund. But if they take part in training they can reduce their monthly taxable income by 1,500 Ft per apprentice.

Interviews showed that this tax allowance would not encourage entrepreneurs to undertake training. The interviews suggest that the motive for employing apprentices, especially the older ones, is the cheap labour they provide.

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[6] Only those who are taxed as an economic company are obliged to pay the contribution to Vocational Education. Those who pay personal income tax (as do most craftsmen) are not obliged to pay this contribution, but, at the same time this means that they are not entitled to support from the Fund.

[7] The distribution of the Fund is controlled by a tripartite forum. As this forum is one of the first real tripartite forums in Hungary during the transition period, I think it is worth examining its operation. It will be the main concern of the next section of this paper.

Table XXIV. Growth of the costs per head in the secondary educational institutions based on the year 1985

Year	Costs per head in						Rate of inflation in % of 1985
	vocational training schools		secondary vocational schools		grammar schools		
	Ft/head	in % of 1985	Ft/head	in % of 1985	Ft/head	in % of 1985	
1985	21,448	100.0	24,576	100.0	17,339	100.0	100.0
1990	52,577	245.1	70,389	286.4	60,029	346.2	199.3
1991	66,550	310.3	84,416	343.5	72,030	415.4	269.1
1992	89,647	418.0	103,448	420.9	86,544	499.1	331.0

Source: Vocational education in Hungary, Ministry of Labour, 1993

Table XXV. The costs and normative per head in 1992

Denomination		Grammar school	Secondary vocational school	Vocational training school
Per head	costs	86,544	103,448	89,647
	salaries and contribution	56,080	65,172	54,729
	normative Ft/head	51,000	63,000	76,000
	in % of costs	58.9	60.9	84.8

Source: Vocational education in Hungary, Ministry of Labour, 1993

Table XXV shows that the normative system amounts to 85 per cent of the costs in vocational training schools. The situation is worse in the other two forms. But, according to the interviews, this is not always the case and often the opposite happens. According to representatives of self-governments in Budapest and Debrecen, the local authority has to complete the State support by 30 to 40 per cent. This seems to contradict the figures of the following table.

Table XXVI. Sources of the budget of the institutions, 1992 (according to a survey)

State support (normative)	70-80%
Contribution of the selfgovernment	7-8%
Direct contribution of companies	2-13%
Fund of Vocational Education, other foundations	0%-2%
Other, schools' own income	4-13%

Source: Szép, Financing vocational education, in Vocational Education, 1994/6

3. ACTORS ON THE MACROLEVEL AND THE OPERATING OF THE TRIPARTITE FORUM

In this chapter I shall deal with the operation of the tripartite forum of the Hungarian VET system, a body which is quite new and unique in Central and Eastern Europe. It would therefore be interesting to look at what kind of problems this forum is struggling with.

3.1 The tripartite forum and its members

The tripartite forum of vocational education - the National VET Council - was established in 1991. On the employees' side, its members are representatives of the seven most important trade unions. Members on the employers' side are from the National Association of Manufacturers, the National Association of Entrepreneurs, the National Association of Craftsmen, the National Association of Retailers, the Chamber of Agriculture, the Association of Farmers, the National Council of Industrial Co-operatives, the Hungarian Chamber of Commerce and the National Association of General Consumers' Co-operatives. On the side of the government eight ministries are members – the Ministries of Public Welfare, Finance, Environment, Communication, Labour, Industry and Commerce, Education – as well as other experts and the editor of the Journal of Vocational Education.

The Council holds regular monthly sessions, which are open to the public, on two to seven issues. Seven to nine organizations take part in these meetings, with 40 to 50 persons normally present. The National VET Council is competent to express an opinion on questions of vocational education and training, including adult education. But it is only authorized to make real decisions on the distribution of the Fund of Vocational Education - more precisely, to judge the amounts to be transferred from the Fund of Vocational Education and the Fund of Employment aimed at training. The largest part of this amount (60 per cent in 1991 and 80 per cent in 1992) is transferred to the Labour Councils and tripartite forums at the county level, while the rest is distributed through tenders proposed by the National VET Council.

Although this forum formally has many members, in reality only some of them regularly take part in the sessions. I conducted interviews with the representatives of the most concerned parties of the council, i.e. the representatives of the Ministries of Labour and Education, the Hungarian Chamber of Commerce and the National Association of Manufacturers and National Association of Entrepreneurs. These organizations almost always attend the meetings. But this does not mean that they have equal power. As we shall see, the Ministry of Labour plays a dominant role in decision making and, as one interviewee mentioned, it "uses the forum as a 'fig leaf' for its own decisions". The employers' organizations, such as the National Association of Craftsmen (IPOSZ) or the National Association of Practical Teachers[8], have more influence on the decisions which affect training. These organizations can influence the process of decision making, even sidestepping the forum. This is true for the National Association of Manufacturers, which is the most powerful employers' organization, who regard this forum as a 'phantom organ' and thus do powerful employers' organization, who regard this forum as a 'phantom organ' and thus do not take part in it. Practically, they do not need the forum, as they have several informal ways to exert influence, but they do formally have representatives for the forum in case they need it. However, the fact that this organization is an important actor in training was suggested by a representative of the Ministry of Labour, who said in an interview that the Ministry is carrying on negotiations with one group of large companies, to discuss spending a part of the Fund for Vocational Education to train their labour forces.

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[8] This organization consists of approximately 40-50 groups (limited liability companies, share companies, deposit partnerships), and covers the training of 8,000 to 9,000 apprentices. In Budapest, it concerns 14 groups and 3,000 apprentices. I will return to this subject later in this paper.

As for the trade unions, they are fighting each other, struggling for their identities, but in fact, have very little influence. That is why I ignored them when doing my interviews. (But their role can change; they could potentially become more influential with the socialists in the government.) Since this council is a relatively new organ, the rules of the game are changing, (for example, the new Acts on Vocational Education and on Chambers, which will be in force approximately in 1996). There are still problems related to the representation of interests and, because of the weak economy and the tradition of centralization, the council often seems to be only a quasi-tripartite forum. On the surface it seems to work quite smoothly but, according to the people interviewed, there are problems under the surface. The best way to clarify the critical issues in the operation of the council is to investigate the process of decision making regarding the new Act on Vocational Education and the National List of Trades (which was a very topical issue at the time of the interviews).

3.1.1 The government's position

As we have seen, the system of administration and finance of vocational education is quite complex. The Ministry of Labour is responsible for the whole of vocational education and the other ministries are responsible for training in their fields. For example, the Ministry of Education is responsible for 100 qualifications of artistic or cultural character, but their volume is not significant. As the representative of the Ministry of Labour said:

> 'The Ministry of Labour is not the first among the equals, but definitely has a central managing and controlling role. It draws up the List of Trades and publishes it, but the ministries concerned are responsible for the specific trades. There are fewer qualifications in industry today, but the Ministry's dominance remained. Industrial-type qualifications equal half of the total qualifications on the list ... But as far as textbooks, financing or laws are concerned, ministries which are responsible for more trades are not more powerful than those responsible for few trades.'

The Ministry of Education is responsible for public education (and thus for general education in vocational schools as well). Most primary and secondary schools are maintained by the self-governments and are financed through the State budget, through the budget of the self-governments and in the case of vocational schools, also by firms and schools themselves. The self-governments have links with both the Ministry of Labour and the Ministry of Education. According to my interviewees, the self-governments have more conflicts with the Ministry of Education. Besides personal and political reasons (at self-governments the opposition is generally in power), the representative of the Ministry of Labour said:

> 'The conflicts arise from the fact that the two ministries have different types of responsibilities. The Ministry of Labour has never striven for intervening in administration of the institutions, but the central administration of public education can be a source of conflicts between the self-government and the Minister of Education. We have common problems with the self-governments, such as the system of qualifications and concrete programmes for unemployed, so we are dependent on each other. But financing the schools, the fixing of the 'normatives' (scale of quotas per pupils) and the setting of teachers' wages are all difficult issues influencing the distribution of central resources. We do not deal with direct maintenance and control of the institutions.'

So, most of the conflicts arise when the cake to be shared is not big enough.

3.1.2 The employers' position

Among the employers' organizations, I had interviews with the representatives of the IPOSZ (National Association of Craftsmen), the Hungarian Chamber of Commerce (Magyar Gazdasagi Kamara) and the National Association of Entrepreneurs (VOSZ).

Although the *Hungarian Chamber of Commerce* has a long history, its position during the transition period is uncertain. It is hoped that a new Chamber will be formed, but it is not clear what exactly will happen. This organization brings together more than 60 chambers, consisting of 16 regional and 48 professional leagues. One finds more than 400 share companies, state companies and 2,000 to 3,000 limited liability companies and craftsmen in the chambers (Mártonffy, 1993). Since 1990, according to the Act on Associations, membership in the Chamber is voluntary. Its task is to represent the interests of employers and the economy. An advisory body in education, which plays a role in forming the List of Trades, has been established. It is interesting to note that the Chamber did not deal with vocational education before 1991, so this field is quite new to it. Its biggest problem is financial, as payment of dues is irregular. On the one hand, due to the voluntary nature of membership, the register of members is far from perfect; on the other hand, a lot of firms cannot pay because they have gone bankrupt.

Among the employers' organizations, the *IPOSZ* has the longest tradition in vocational education. In 1938 there were 60,000 apprentices – now there are 30,000 – in craftsmen trades. Before 1990 this organization worked as a quasi-chamber and authority and had official rights in vocational education, in training of 'masters'. Since 1990 it has been operating according to the Act on Association and has lost its official rights. The Chamber has high expectations concerning the new Act on Chambers, according to which membership would be obligatory and two kinds of IPOSZ would be established, one for protecting interests, the other operating as a Chamber. This organization has gotten smaller over the last few years. The number of members (160,000) decreased by two-thirds in two years due to the abrogation of compulsory membership. The central staff, consisting of 40 persons, is one-quarter of the staff three years before. The IPOSZ also has problems with the payment of dues. The financial difficulties and the uncertain legitimacy are probably the main reason for the conflicts between its associations at national, capital and regional levels.

Since 1990, one can set up an enterprise without any qualifications. This has lessened the importance of the educational activities of the National Association of Craftsmen. In addition to the legitimacy and financial problems, a third problem is the lack of information. The organization does not have sufficient information about its members, nor on their educational activities. The National Centre for Training Development of the legal predecessor of the IPOSZ was transformed into IPOSZ Intermercant Ltd., but it has no connections with the IPOSZ. The representative of the IPOSZ responsible for vocational education could not even estimate the volume or character of the training performed by this company. The importance of this organization in vocational education is increasing because, although the number of registered craftsmen is decreasing, their number in the economy is increasing, and with the growing popularity of the private sector, the reputation of these trades is increasing, making them attractive for apprentices. Although we do not have precise data on this, some estimates do exist, based on surveys.

Table XXVII. Figures about training in the craftsmen trades (Data in 1991-1992 are estimated through representative surveys)

Year	Number of registered craftsmen	Number of craftsmen training apprentices	Apprentices in the craftsmen trades
1947	214,541	no data	48,792
1953	47,186	no data	85
1988	153,000	6,100	9,420
1990	163,000	6,500	12,000
1991	140,000	12,000	20,000
1992	120,000	15,000	26,000

Source: Mártonffy: Activities of the private sphere and of the organizations representing economic interest influencing vocational educational policy, 1993

According to the representative of the IPOSZ responsible for training, the number of apprentices is now 30,000. This means that both the number and the proportion of apprentices with craftsmen are increasing. Their proportion among the total number of apprentices (pupils at vocational training schools) was 6 per cent in 1991, 10 per cent in 1992, 13 per cent in 1993 and approximately 15 to 16 per cent in 1993. There has been qualitative as well as quantitative development. To increase the quality of vocational education and training and to ensure the recruitment of craftsmen, artisans decided to contribute to apprentice training together with the vocational training schools. They revised the content of curricula based on German models and organized 'IPOSZ classes'. They visited 50 vocational training schools willing to co-operate and picked three trades (motor mechanic, brick-layer and painter) to begin with. The experts of the National Institute of Vocational Education, the Ministry of Labour and the Ministry of Education helped put together the experimental curriculum, while the practical parts were developed by craftsmen and teachers. The theoretical aspect of training has decreased, while the practical aspect has increased. The motive for this was that the apprentice should spend more time with the craftsman. As one interviewee said:

> 'The craftsman says that the pupil spends so much time at school that skills cannot be imparted.'

However, when the curriculum of the first trade (motor mechanic) was completed, the Ministry of Education changed its mind and wanted to return to broader academic education. A middle course was found by increasing the academic part, but concentrating it in the first school year. In the second and the third years the apprentices, as in the dual system, spend most of their time with the craftsman.

The costs of the development of curricula in the first three trades were financed by the IPOSZ, but the costs of the next six ones were financed through the support given by the National VET Council from the Fund for Vocational Education. The curriculum also contains German language teaching and information on how to launch an enterprise. IPOSZ now has links with 72 vocational training schools in nine trades.

The *National Association of Entrepreneurs* is the only relatively new organization on the employers' side. It was established in 1988 from the entrepreneurs' section of the Hungarian Chamber of Commerce. It aims at protecting the interests of the employers and owners in private Hungarian enterprises. VOSZ formally has 6,000 members but, according to one of the leaders of the organization, the real membership is around 3,000, which means roughly 30,000 employers. VOSZ does not take part in training, either in the form of a limited liability company specialized in education, or by directly training apprentices, as it does not want to compete with its members who are interested in training. Unfortunately - but not surprisingly - they do not have precise data on the training activities of their members. My interviewee, who is responsible for training in VOSZ, sent me to the Ministry of Labour for information on their educational activities. (The Ministry did not have the necessary information either.)

The *National VET Council* took part in the elaboration of the Act on Vocational Education and the National List of Trades. As the council distributes the Fund for Vocational Education, I asked the representatives of the organizations what they thought of the new Act, the operation of the council (including the relationship between the three sides and within them), the problems of financing vocational education, how to get the economy more involved in training and, finally, what they thought of the Fund for Vocational Education.

3.2 Opinions of the members of the council on the critical issues of the VET system

3.2.1 Opinions about the changes in school structure and on the Act on Vocational Education

As regards the Act on Vocational Education, the employers' organization more or less agree with extending the duration of general education and postponing the starting age for apprenticeship from 14 to 16 years. But, according to IPOSZ, this was not realistic:

> 'We shouldn't live in a dream world, everybody won't have baccalaureate in this country. If today a lot of pupils don't finish the eight classes of primary school until age 16, why should more finish ten classes? There will be a need to train pupils who have completed only five, six or eight classes. So it is no use allowing pupils to enter an apprenticeship only on condition that they have finished the ten classes of basic education.'

One of the biggest problems with the Act, according to the representative of the Chamber, is that

> 'the Act wants to shift the responsibility for practical training to the enterprises, but the management and the control would remain in the hands of the Ministries concerned.'

One example of the dominant role of the State is that although the Act on Vocational Education addresses the task of describing requirements and defining the content of the profession to the new would-be chambers, these rights are still assigned to the Ministries responsible for vocational education and training. The reason for this is that the existing chambers are not able to fulfil these tasks, and there are no new chambers yet. This is true, but part of the Act which says that by setting up the new chambers, the government will hand over these tasks, but can take back the responsibility if the jobs are not carried out well is considered harmful. According to the representative of the Chamber of Commerce, the problem with this is that the conditions of the transfer of these rights are not specified and it is not clear under what conditions the government can take these rights back. Although employers do not like interference of the State in the control of the VET system, they are far from being against State support when it concerns financing.

According to the representative of VOSZ, the problem with the Act is that while acts have aims and tools, the tools do not always suit the aims. When the Act comes into force the reaction of the actors of the economy may not be the expected one. He feels that the Act on Vocational Education will not stimulate entrepreneurs to take part in training. The Act contains a lot of suggestions of the trade union lobby which, according to him, is harmful because:

> 'The children might be protected, but there will not be anybody to train them... One trade unionist said that apprentices at farms shouldn't wake up at 5 o'clock in the morning. So we said OK, then in farms where pupils are trained cows will be told to give milk only from 8 o'clock.'

He is much less enthusiastic about the new chambers. While the IPOSZ expects the chambers to protect the purity of training, the VOSZ regards it as the revival of the old State apparatus and does not agree with compulsory membership in chambers.

As for the structure of the educational system, the government side prefers expanding general education, but in different ways. The Ministry of Labour supports secondary vocational schools while the Ministry of Education supports grammar schools. The representative of the Ministry of Labour told me:

> 'Many secondary vocational and vocational training schools try to move the academic part of their education into the first two years and extend the duration of education and training to four years, so they create a so-called 2+2 form of education. We agree with anything that lengthens the duration of education and training and can be financed by the two ministries, since the labour market cannot employ so many school-leavers... In the last four years, the system of vocational education has been stabilized. Some schools will be

> stronger and there will be schools that will have to be closed. One can see the trend of integration... Those schools that say they have "so many teachers of academic subjects and so many practical teachers, give us a programme that suits these conditions" will be the losers. But without changes schools cannot develop...
>
> 'I am not happy if an institution with a workshop specializes in general education. I would like to see a primary school with ten classes. It would not make any sense if the talented children disappear from the primary school at ten, those who are less talented disappear at 12 and the least intelligent disappear at 14, thinking that general education is enough for labour market, while the rest would stay in vocational education and training. But the economy doesn't agree. Employers do not need paper, but qualifications. For example, car manufacturers such as Suzuki or General Motors didn't want to employ school-leavers having only the baccalaureate. They said the applicant for the job must have some qualifications, and later they would teach them the necessary skills on the job... So the expansion of grammar schools can be harmful, if it is good only to fill up the capacities of the schools without providing high-quality education. Then their school-leavers will struggle against difficulties in the labour market.'

According to him we should follow a model based on Hungarian reality. Dual training should depend on the real economic capacities.

The representative of the Ministry of Education was bitter in her remarks. She feels that training at vocational training schools is a dead-end. Only skilled workers with a baccalaureate are capable of launching an enterprise. She believes that the duration of primary education should be lengthened from 8 to 10 years, since the apprentices are exploited by the masters. As she said, 'dual training doesn't produce educated people.'

3.2.2 Opinions about the operation of the council

One crucial point about the operation of the council, according to the employers, is that there is not enough time to decide, to form a well-established opinion on the materials handed over by the Ministry of Labour. All three associations find the dominant role of the government harmful. There are many examples of how the government ignores the common standpoint of the employers. Often, the bills brought up in Parliament do not contain the points discussed at the meetings of the council, but contain completely new ones. The role of the employers in this tripartite forum is minor, as the representative of IPOSZ said:

> 'The Government uses this forum as a `fig leaf' for its own decisions, shifting the responsibility upon the employers. The council is not authorized to make any decisions except in the field of the Fund for Vocational Education. It has the right to express its opinion only about questions of vocational education and training.'

It is felt that the text of the Acts sometimes has nothing to do with their work at the forum and serves only to legitimize the government's decisions.

On the other hand, the employers' organizations know that they are far from perfect. They understand that this forum is a quasi-tripartite forum, where the members are not yet legitimate, and often transmit their own interests and not the interests of those they represent. Since these organizations are not rich in educational experts, they send leaders of educational institutions to the forum meetings, which means that the interests of the special educational market are represented in the council rather than the interests of the real economy.

There are conflicts between the employers' organizations and the trade unions, because the latter often represent the interest of the schools and teachers. As the representative of VOSZ said:

> 'For me as an employer the school is not a partner. At the discussions on the different acts, mainly the interest of the pupils, the teachers and the schools were represented. I think that the interests of all the employees should be represented; this is more important than whether teachers feel secure as regards vocational education... There is an organization on our side; it has its own vocational training school and protects the interests of school against the interests of employers.'

Although the members are generally satisfied with the operation of the council, since it aims to make fair decisions, they are not satisfied with its effectiveness, because the government ignores the council's opinions in the process of decision making. The council was against the retraining centres that have been built up. The employers would like to have more influence upon training through the council.

It is quite interesting – but not surprising - that the representative of the Ministry of Labour has a different point of view:

> 'The work of the council cannot be regarded as formal, since in every case, the decisions – from how to use the Fund for Vocational Education to forms of financing to the establishment of retraining centres and tenders - were made after having reached consensus.'

The problems of the council's operation are rooted in the fact that the government's side is relatively stable, while there is much change on the other two sides. The social partners are struggling for their legitimacy. On the other hand, the filter through which the interests of economy appear is very complicated.

> `Concrete interests are arising through concrete persons. One side is quasi-bureaucratic, the other is specialized more or less in the protection of the interests of teachers and, on the third side, those economic organizations having some connection with training are represented.'

The governmental side of the council is far from unified. There are a number of conflicts between the Ministry of Education and the Ministry of Labour. The representative of the Ministry of Education complained that the Ministry of Labour ignored his Ministry's opinions and that the time given to think about certain questions was too short. She spoke very bitterly of the council:

> 'The council is not competent at all. It has no economic background it and interests are represented haphazardly. In my opinion, none of the sides of the council is legitimate. There are no criteria, decision making is subjective.'

3.2.3 Opinions about financing

According to the employers, most of the conflicts arise from the fact that many of the tasks that are financed through the Fund for Vocational Education should be financed by the State budget. As the representative of the Chamber said:

> 'We have to provide the National Institute for Vocational Education with resources from the Fund. If this money is spent on development of the curricula content, then we can agree with it. But if they ask for money to elaborate baccalaureate theses, or to arrange yearly competitions for pupils which by law should be financed by the ministries concerned, we cannot accept it. It is funny that the other social partners in the council accepted this. Only I took objection, since the members of my organization told me to do so. They got angry and said that the economy must pay twice for the same goal, since first it paid taxes to back public education, and secondly it had to contribute to the Fund for Vocational Education, and this money is spent on public education again. Financing public education is the job of the State.'

According to the representative of the Chamber, the reason the others voted in favour of these steps is that they made their decisions without due consideration. The representative of the IPOSZ had another opinion. He said that since they take part in training directly, they can make use of the services of the National Institute for Vocational Education. For example, it helped IPOSZ to elaborate its curricula:

> 'We all know that we shouldn't agree with financing the National Institute for Vocational Education from the Fund, because it should be the job of the Ministry of Labour. But this institute fulfils a lot of tasks, and if we pay them, they do what we want.'

The other reason for employers to tolerate the dominance of the government is that employers are not strong enough to bear the burdens of practical training alone. This is why they 'entered the game' and agreed that the self-governments can buy the workshops of bankrupt companies with the help of the Fund which gives them long-term interest-free credit. Later, however, the employers' side changed its mind and insisted on giving entrepreneurs a chance to buy the workshop as well, making use of favourable credit conditions from the Fund. They said that maintenance of these workshops at schools is not cost-effective since the schools are interested in enroling as many pupils as they can to get more State support, but enterprises could run them more effectively because they are interested in training for the market. Employers want the same conditions for training as schools have.

> 'The tender for these long-term interest-free loans from the Fund must be open in order to give everybody the chance... But schools don't give up their workshops since they then get a larger share of the budget. This has always been so, that schools are given a certain amount of money per pupil, and craftsmen are given a certain discount on their taxable income, but the latter is a much smaller allowance than the former.'

This desire of the employers was taken into consideration in the modification of the Act on Contribution to Vocational Education, but the result is a compromise. Although entrepreneurs can buy workshops under favourable conditions, self-governments also have an option on them. While the representative of the Chamber of Commerce regards this as a step forward, she did not conceal her dissatisfaction:

> 'More and more, we feel that these workshops must be run more effectively. Let's not consider only the interest of the pupils, that they have to be somewhere... If a self-government applies for this credit to buy a workshop and asks for 15 million Fts, and a commercial enterprise would need only 10 million Fts from the Fund, then I as the manager of the Fund would take into consideration that I could save 5 million Fts giving the money to the latter.'

The representative of VOSZ had a tougher point of view. According to him, workshops at school are dysfunctional and the money spent on them could be the financial source of encouraging entrepreneurs to train apprentices:

> 'The trainers at school workshops have never practised the new technologies, they learn them from books.'

According to the representative of the Ministry of Labour, the problem with the system of favourable credit is that it works very slowly. As for the workshops at school, he felt that:

> 'the workshops allotted to schools have real functions, they guarantee training. It would not be good to exclude schools, or not to give them an option, because children are attached to schools and not to practical training.'

On the question of workshops, one can see that it is not clear whose interests are represented on the employers' side. If the person acting on behalf of an employers' organization at the council meeting is in fact a leader of an educational institution, he would argue for workshops at school. But, as the leader of an educational enterprise, he is also entitled to be an employer. The roles of the social partners are often confused and one can sometimes find employers on the side of the government or the trade unions. According to the representative of VOSZ, the issue of workshops at schools run by the self-governments is a political rather than economic one.

'The functioning of these workshops depends upon whether the party in power in the self-government wants to continue exercising its activity. If parents bring their children to them and they are not admitted, the parents will say that they won't vote for them. So children are admitted even if they will be unemployed three years later, because unemployment is financed by the economy'.[9]

3.3.2.4 *Opinions about the problems of practical training and its connection to the economy*

As for practical training, employers have different opinions. Even the employers' representatives do not think that practical training is guaranteed at firms, due to the recession and to changes in ownership structure. The trade unions prefer practical training at school. But the representative of the National Association of Entrepreneurs was against workshops at school. He said:

> 'Practical training should be more specialized, more practical. If a young skilled worker wants to work, he has to be trained to produce products. Now they are unfit for it, they didn't learn to produce things. When he learned his trade for three years he did everything two or three times, but there isn't any field where he could get practice to enter the market as an efficient worker. But an employer cannot afford to employ a school-leaver, to train him or her for three to five months, and after three months find that he or she is not the one he needed, but he has to pay the wage costs anyway. This is why I consider out-of-school training very important. Apprentices should spend only half a year at a school workshop learning basic things, but afterwards they should be sent into production.'

Employers first began to fight for better positions in 1993. The result was that the Ministry of Labour suggested raising the amount of the credit given under favourable conditions by the Fund by 100 million Fts to 400 million Fts. Schools were given 300 million Fts and employers were given 100 million Fts. But, according to the representative of the Chamber of Commerce, employers must change their attitude towards training, because it is easy to not take part in training, but instead criticize it and expect more and more favours from the State. Although, according to her, it is true that entrepreneurs are not adequately encouraged to train apprentices. IPOSZ conducted a survey among its members on the costs of training, and found it to be between 40,000 and 100,000 Fts. They then asked the Minister of Finance to give them a 10,000 Fts tax allowance.[10] The only result is that they managed to increase the discount on taxable income from 1,000 Fts to 1,500 Fts. per month. But, in fact, this does not stimulate entrepreneurs to train.

As the representative of VOSZ explained:

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[9] However, in practice this does not seem to be true - firstly, because self-governments feel responsible for their people; secondly, they also have to finance unemployment, for example by paying benefits to people without a job for more than a year and so not entitled to unemployment benefit.

[10] This means that the sum paid as a tax can be discounted by 10,000 Fts, which is much more favourable for employers than the discount of 12,000 Fts a year from taxable income before taxation.

> 'I have to tell you, it isn't worth even administering it. I trained three pupils for two years, I paid all the obligatory contributions to vocational education and I didn't claim back the countervalue of my costs, which I was entitled to. If I claim the money, there is no guarantee that the tax controller won't come and tell me it isn't correct.'

According to the representative of the Chamber of Commerce, in the long run, firms take part in training in order to improve the quality of recruitment, with the prospect of training skilled workers of high quality for themselves. This is the opinion of the representative of VOSZ as well:

> 'I am convinced that dealing with training is reasonable for enterprises. I have about six apprentices in a year. If I want to develop, I can select from those six. I know what they are worth, so if I choose from them, I know that I will not have to sack them after six months because I know them well.'

The representative of IPOSZ expressed a similar opinion:

> 'Those who deal with training do so because they love their profession. But they also can select from among the apprentices and employ the best ones... Eighty per cent of apprentices at private enterprises are employed after their apprenticeship'.

Apprentices are also a source of cheap labour, although the employers are reluctant to admit this. The representative of IPOSZ spoke frankly about this:

> 'Those who have been training for a long time have first-year, second-year and third-year apprentices; and these young people are productive. Not in the first year. But in the third year the apprentice offsets the losses he or she might have caused in the first year. These young people can perform some jobs and can train each other. So, with five or ten apprentices, one is certain not to lose money.'

As for the retraining centres, the representative of the Chamber of Commerce supports the idea of establishing training centres where employers will have greater influence, since they sit on the supervisory committees of the centres. However, they are not sure whether or not their operation is effective. The other members on the employers' side have quite a different opinion on this question. They regard these centres as their rivals in the educational market, and since they are supported by the State they can offer cheaper services than the private training enterprises. As the representative of VOSZ said:

> 'I consider them [retraining centres] to be a real catastrophe. They shouldn't exist in this form. They are enormously expensive but offer training in those basic trades which can be financed by enterprises, as well... They ruin the educational market. In Hungary, there are a lot of enterprises specialized in training, which invest and risk their own resources. These centres are financed partly from the budget, while private enterprises must bear all the costs themselves.'

For him, the centres are a bureaucratic organization and not a place where employers can influence training, which contradicts the statement of the representative of the Chamber of Commerce. The reason for this might be that the representative of VOSZ is an entrepreneur himself, while the representative of the Chamber is a member of a bureaucratic organization.

The IPOSZ finds it harmful that, while similar retraining centres in Ireland were established by grants, the Hungarian ones are built from credits which have to be repaid. IPOSZ would like to have Inter-Enterprise Training Centres similar to the German ones, but they do not get any help in setting them up.

> 'There must be retraining because there is unemployment. Then let's put into the Act what we want - that there be Inter-Enterprise Training Centres. But this couldn't be put into the Act because they didn't exist. But Chambers didn't exist either, and they are in the Act... There is only one such Centre in Hungary, at Dombóvár, which was founded solely with the help of Germany... The Ministry said that the World Bank didn't give money for what we wanted.'

The representative of the Ministry of Labour is of a different opinion:

> 'If the State makes a significant step, it does not make it to ruin the competition. I am always surprised by the fact that there are 5,000 private enterprises organizing training. I do not know whether there are too many or not, but only those enterprises that offer long-term, high quality training should exist. But they form cartels, and prices go up. So the State had to do something in the field of training and retraining of the unemployed... The State has appeared in this market and improved the quality... Last year the State invested 5 billion Fts in training for the labour market... It is true that this means subvention, but according to our data the chances of getting a job are better at the retraining and training centres. Naturally, it is detrimental for the 'little fish'. They consist of one or two persons who applied to the Fund, and then found a school to train the clients and made a very large profit. This kind of enterprise must be replaced... We need an educational market with private enterprises as well, but this market shouldn't be self-serving.'

As for the relationship between school and market and the model of vocational education, the Chamber and IPOSZ think that the Hungarian VET system should follow the German dual system. But, according to the representative of VOSZ, schools must remain the ones who organize vocational education:

> 'The apprentice shouldn't contract with the entrepreneur or craftsman, because there are only few enterprises where the whole trade can be covered. It is more important to contract with the school. Financing of vocational education must also be made through schools.'

But vocational education must be a rational and open system of training. As he said:

> 'I would like vocational education to be more open, more similar to a market and I would put into the system brakes on overtraining. Schools can train apprentices even when there is no market for it. This doesn't affect the school, as they get money from the budget. The pupils come there because there isn't another place to go, so schools don't have connections with the market.'

If the schools had connections with the enterprises, because they could enrol pupils only if there was a place of practical training available for them with an entrepreneur, then the school would work as an information centre between parents and the economy, and a brake would be built into the system - training would be linked to demand. But, according to the representative of the entrepreneurs, this will not work if there are workshops at schools, which maintain the institutions and make them inflexible in answering the demands of the market.

One problem is that even those organizations representing employers do not have data on their activities, especially in the field of training. Another problem is that the quality of training at firms is not sufficiently controlled. The trainers are not trained, and are not controlled by IPOSZ or by other employers' organizations. That is the reason why they are so anxious for the new Chambers. The only indirect control is the annual organized competition of apprentices.

The management system of vocational education is quite complex. The most dominant actor in this field is the Ministry of Labour, which has a central role in training. The other relatively strong partners are the employers. The Ministry of Education and the trade unions seem to play minor roles. However, while self-governments are not represented at the macrolevel, they play an important role on the local level in the management of schools. This leads to several conflicts. The most important one is the question of financing - the struggle for money. The employers think that the Ministry of Labour wants to shift the responsibility for training to the employers without handing over power. By establishing retraining centres and giving schools favourable credits from the Fund, private enterprises will be at a disadvantage in the market. On the other hand, the government thinks that the competition is not fair and that there are a lot of private enterprises in the educational market profiting from public revenues and exploiting schools.

The tripartite council was created to represent real interests, to help vocational education and the market to find each other. Nevertheless, there are several factors which impede this process. Lack of information prevents the actors from getting an accurate picture in this area. The problem of legitimacy diminishes the power of this council. The sides of employers and employees are not legitimate since they are changing. This results in the dominant power of the government. There are actors in the field of vocational education who can influence the government directly, sidestepping this tripartite forum, which also decreases the importance of the council.

It is not always clear whose interest is represented on the different sides. Since the members of the forum often lack experts on vocational training, they frequently ask a headmaster of a training school to represent them at the meeting. (Training schools maintained by self-government can also be members of the Chamber of Commerce.) That is why the representatives of the employers and employees, instead of representing the economy, protect the interests of the vocational schools. This is a kind of agency problem, where the agent (for example, a headmaster) has its own interests and the interests of the side (employers or employees) they represent is filtered through their personal interests.

There is a big gap between reality and the law. Conflicts are often ideological, about the question of whether more training or more general education is necessary. Employers vote for dual training, the government and trade unions vote for more general education. There are ideas about what direction the Hungarian vocational education should take in the long run, but there is no strategy for the transitional period - which seems to be lasting longer and longer.

Most of the conflicts between the governmental and the employers' sides arise over the question of money. In most cases, the Ministry of Labour has the final word. Employers consent to this, although they grumble about it. This shows that the employers are conscious of their relative weakness. Nevertheless, in spite of the extreme opinions, vocational education, although it has great problems, is not in a state of crisis. It has become more decentralized instead of moving in a more centralized, corporate direction, due to the relative weakness of social partners. There are several avenues open to Hungarian vocational education. The council, now working as a quasi-institution, could develop into a real tripartite forum when the transition period is over, and the position of the social partners and the representation of their interests improves.

4. TENSIONS AND SOLUTIONS AT THE LOCAL LEVEL

4.1 Two areas of investigation: Csepel and Debrecen

To get a more detailed picture I chose two areas of Hungary - Csepel and Debrecen - for interviews with the important local actors in the field of vocational education. The criteria of selection were the rate of unemployment, the proportion of young people among the unemployed, the number of training institutions and the structure of industry. I aimed at developing a diversified picture, so I chose one territory where the rate of unemployment is relatively low (Budapest - Csepel) and another where this rate is high (Hajdú-Bihar county - Debrecen).

Budapest is a city with industrial and service sectors. Debrecen is in the countryside and is less industrialized but has a larger agricultural sector. Both places, however, are characterized by a relatively high number of young unemployed and by a high number of vocational training schools, which I think makes them both highly relevant to the problems of vocational education.

The population data show that Budapest is a huge but aging city, while in Debrecen the population is growing and the proportion of young people is above average. Since little data were available on Debrecen, I shall refer in the following to the data of Hajdú-Bihar county. Although Debrecen is more developed than its surroundings, as the centre it is severely affected by the problems of the countryside.

The rate of unemployment in Budapest is much lower than the national average. The national average rate was 12 per cent in December 1993, while in Budapest it was only 6 per cent. But it is interesting to note that the situation of young people in Budapest has been deteriorating since 1991. The proportion of young people among the registered unemployed was only 23 per cent in 1991, which was below the national average of 28 per cent. By the end of 1993, Budapest reached the national average of 27 per cent. In Hajdú-Bihar county, in eastern Hungary (which is less developed than the western part), the rate of unemployment (16 per cent) is much higher than the national average. The proportion of young people among the registered unemployed is, on average, 27 per cent.

In the county of Hajdú-Bihar more people were subsidized in 1992 than in Budapest. Since the population is much smaller in Hajdú-Bihar, it seems that people are disproportionately poorer in this county. The data on infrastructure indicate that Budapest is much more developed than the other parts of the country.

Table XXVIII. Some indicators on the two regions

	National average or total number accordingly	Budapest	County of Hajdú-Bihar	Debrecen, centre of the county
DEMOGRAPHY				
Population (1 January)				
1980	-	2,059,347	548,728	198,195
1990	-	2,016,774	-	212,235
1993	-	2,008,546	-	217,287
Proportion of age-groups according to the total population (1 January 1993):				
less than 14	19 %	16 %	21 %	-
more than 60	19 %	22 %	17 %	-
EMPLOYMENT				
Rate of unemployment (December 1993)	12 %	6 %	16 %	-
Proportion of young people (under 25) among the registered unemployed (December 1993)	27 %	27 %	27 %	-
Persons employed in industry as a percentage of the population (1992)	10 %	10 %	9 %	-
WELL-BEING				
Number of persons subsidized (1992)	-	2,791	3,475	-
population per 100 dwellings (1 January, 1993)	262	249	269	-
INFRASTRUCTURE				
Per capita investments, total HUF (1992)	-	68,582	29,772	-
Number of telephone stations per 100 population (1992)	20	43	15	-
SCHOOLS				
Number of secondary vocational schools	428	94	24	-
Number of vocational training schools	329	52	16	7
of which it the number of vocational training schools specialized in manufacturing	186	34	10	-

Source: Statistical yearbook of Hungary, 1993

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As for the number of schools, 17 per cent of the institutions for vocational education are in Budapest (223 out of 1277). There are 329 vocational training schools in Hungary, 52 of which can be found in Budapest. Out of the 186 vocational training schools specialized in manufacturing 18 per cent, or 34 schools, are in Budapest. Considering the number of training institutions, Hajdú-Bihar county is the third after Budapest and Pest county. It has 16 vocational training schools, seven of which are in Debrecen, and six under the authority of the self-government of Debrecen. Debrecen is an interesting place for investigating training because the second of the existing training centres in the country was established there. (The first is in Miskolc, which is the centre of Borsod county, with the highest unemployment rate in Hungary. See more details on this later in this paper.)

Hajdú-Bihar county is a relatively young and poor part of the country. However, the proportion of the people employed in industry here is almost the same as in Budapest. But while most people in the county of Hajdú-Bihar are employed in agriculture, most people in the capital work in the service sector. Even though the rate of unemployment in Budapest is below average, the deteriorating situation of youth and the high concentration of training institutions are good reasons for choosing to investigate this city. The fact that almost all the training institutions in the capital are maintained by the self-government of Budapest also made it a good choice.

Csepel, which is a southern district of Budapest, is an interesting place for a more detailed case study, because the rate of unemployment (10 per cent) is higher than the average in the capital, and this figure comes closer to the national average of 12 per cent. Csepel is a traditional industrial district of Budapest, which has been greatly affected during this transition period. In 1980, the largest company, the Csepel Iron and Metal Company Trust, had 21,225 workers. The company has since split up and the number of workers decreased rapidly. On the company's territory some 33 enterprises employ only 9,000 employees. It is interesting to note that almost half of the residents of this district work in Csepel. The relationship between the schools and the labour market here might be stronger than in the other districts of the capital.

Debrecen has many general and vocational educational institutions (as well as a university), and is an important training centre for the region. Debrecen, originally a 'peasant town', was industrialized relatively late and its industry was highly dependent on the Eastern European markets. Due to the recession, the large factories collapsed and the training institutions had difficulties. They were able to survive the crisis with the self-government's help, but the differences between training schools have increased and today one can also find schools which are more or less innovative.

I had several interviews with the local actors of vocational education at Southern-Pest and Debrecen. I met the leaders of the vocational training schools, competent persons at the self-government and representatives of craftsmen and educational enterprises. I gathered the opinions of the various actors on the most critical issues of the Hungarian VET system and grouped them.

4.2 Local management system

Both self-governments, in Budapest as well as in Debrecen, have a body of elected politicians. This body makes decisions on several issues, including educational issues. These bodies also have a bureaucratic staff to prepare their decisions. But, due to its ambitious vice-mayor, Debrecen has another characteristic feature in the management of the VET system. The vice-mayor established the Council of Public Education, which consists of several subcouncils, such as the council of grammar schools, council of vocational education, etc. Its members are school leaders. He aimed at:

> 'representing another type of interest on the employers' side. Earlier, the question of money was overemphasized, now the main point is the content of training. The trade unions cannot say now that only they know what is happening at schools, and the point is not to develop at all. That is not the point. The point is to develop professional programmes taking into consideration the interests of teachers as well.'

According to the Beregszászi school's headmaster, this council should work better. The problem is that the whole system of vocational education in Debrecen is not clear - there are a lot of parallel developments, that is, a lot of schools train in the same trades. But, according to the representative of the self-government of Debrecen, the biggest problem is the absence of a national training programme. The Ministry of Education and the Ministry of Labour function separately, without harmonizing their work, which often hinders the self-governments from moving forward.

The self-government of Budapest is responsible for the maintenance of all the vocational educational institutions in the capital, which means it has to finance and administer 113 vocational schools. The politicians at the self-government can even decide what kind of education and training should be in the schools. But, according to the head of the department responsible for vocational education at the municipality of Budapest (she is a bureaucrat, unlike the representative of the self-government of Debrecen I interviewed, who is a politician), the problem is that the content of vocational schooling does not change. Since the market does not function, it does not guide them in decision-making. She said:

> 'Nobody can tell us which direction vocational education should take... The user has never appeared at the several tripartite forums. I have to say that these forums serve temporary interests, they serve fundamentally the interests of school. They don't serve the interest of the inhabitants, only the basic needs of the schools. And what are those needs? To keep the staff, to prevent unemployment of the teachers, to obtain financial resources for the school from World Bank credit, from the Fund for Vocational Education, etc... The direct user - the market - doesn't induce training.'

The common complaint against the administration is that it works very slowly. The representative from the self-government of Budapest regards this as the greatest problem of the management of vocational education, since it hinders schools from reacting quickly. As she said:

> 'It takes at least six months for an issue to be decided, but a market economy cannot afford that. There are 18 committees and they all make decisions. This cannot go on. The general assembly didn't deliver any right for decision-making to the office. Everything is in the hands of the politicians, which causes trouble in the functioning in the system.'

Democratic institutions work slowly due to the transition period. There are a lot of committees and everybody has their opinion. There are no well-developed channels for making decisions. While people used to complain about the slowness of the bureaucrats of the office, now they complain about the slowness of politicians and representatives.

According to the representative of the self-government of Budapest, the rights and duties are not equally distributed. The ministries are responsible for the content of education in schools, but the local authority has to maintain them. People ask 'if I don't have a say in what to teach in schools, then why should I finance them?' Another contradiction in financing is that while the burdens of the self-governments have been increasing, the share of the self-governments in the budget has decreased.

That kind of conflict shows that the government governs through the ministries whereas the opposition is in power in the local authorities. The links between the Ministry of Education and the local authorities seem especially bad, largely because the Ministry of Labour takes a pragmatic view, while the Ministry of Education has a more ideological point of view.

Since the Act has not yet become effective, there is much uncertainty surrounding it. But, like the actors at the macrolevel, the actors at the microlevel have different opinions about the Act and the structural changes involved. Since the self-governments can set up and close down schools, they are active players who can change the school structure in their territory. That is why they are so interested in how the new Acts are going to change the school structure. The representative of the self-government of Debrecen has a different opinion from the representative of the Ministry of Labour about the trends in the structure of education. According to him, the demand for secondary vocational education is decreasing[11], so development must focus on institutions offering general education, i.e. grammar schools. In addition, secondary vocational schools must also be given the chance to launch classes of general education. Vocational training schools must also be given the chance to start secondary vocational programmes offering the baccalaureate.

The Act also poses problems for the self-governments in Budapest. Since the capital is much larger than Debrecen, there are local governments in its 22 districts. While the secondary schools are maintained by the self-government of the city, the primary schools are run by the self-governments of the districts of Budapest. This results in tension between the capital's and the districts' self-governments. Since the number of children is decreasing, there is keen competition for pupils, and for launching nine- to ten-class schools. The self-government of the capital is interested in starting them in the vocational training schools, while the local authorities in the districts would prefer starting them in the primary school. There is a problem of co-ordination between the local authorities.

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[11] The Ministry of Labour has much more interest in expanding education through secondary vocational schools which are under its authority.

The self-governments agree that the age for choosing a career must be postponed to 16 years, and that during the transition period pupils must be kept in schools as long as possible. But the person responsible for vocational education in the municipality in Budapest expressed doubts about the content and financing of vocational education foreseen by the new Act. She felt that the Act is based on a market that does not exist in Hungary. The Act suggests that the State should withdraw from vocational education and training, that new chambers should be established and that the responsibility for training should be shifted to the economy. But the transitional period seems to be lasting a long time, and it is not clear what should be done at the moment. She said:

> 'The first target the self-government of Budapest set itself was to replace the places for practical training by establishing workshops. As these places have disappeared, we had to put these workshops in the schools. This resulted in a contradictory situation, where the Act declares that the market and employers should dominate training, but during the transition period the self-government must run it. How should we act?'

4.3 Training provisions in the two regions

4.3.1 Vocational training schools

The most important places for vocational training are the vocational schools. I visited eight vocational training schools - three in Southern Pest and five in Debrecen.

Specifically, in Southern Pest:

- Csepel Engineering Secondary Vocational and Vocational Training School;
- Csepel Secondary Vocational and Vocational Training School for Textile Industry and Catering;
- Gábor Baross Primary and Vocational Training School in Pestszenterzsébet (this school is located next to Csepel in Southern Pest, but as it is the only vocational training school in this district, and because this district has a lot of links with Csepel, I thought it should be included in this study).

In Debrecen:

- Secondary Vocational and Vocational Training School for Light Industry;
- János Irinyi Secondary Vocational and Grammar School for Food Industry;
- Pál Beregszászi Industrial Secondary Vocational and Vocational Training School;

- No. 108 Secondary Vocational and Vocational Training School for Construction;

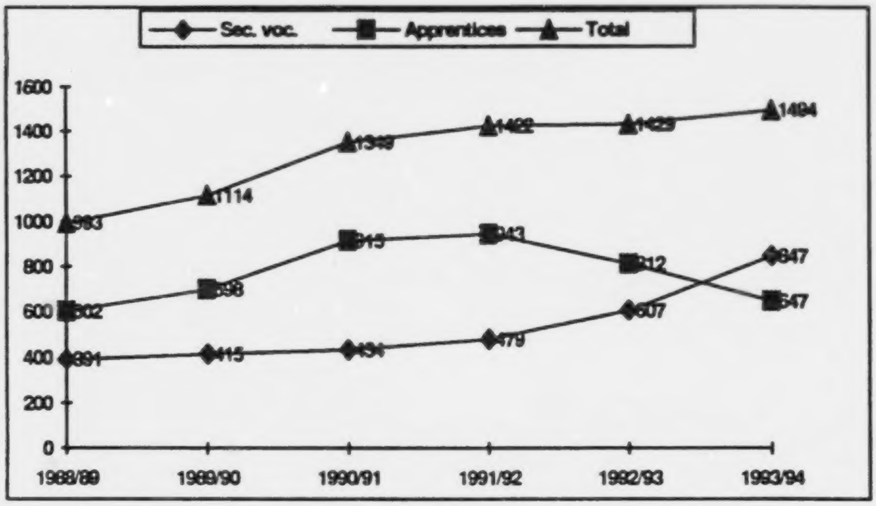
- Gábor Baross Secondary Vocational and Vocational Training School (as it was formerly called No. 109 Vocational Training School. I will use this name in order to avoid mixing it up with the other Gábor Baross school).

I found great differences between the schools although they are struggling with the same problems. Those schools which could implement changes in time and could remain or become attractive for the pupils and for the parents were able to maintain or increase their enrolments. The less innovative schools are the huge vocational training schools which were based on the large-scale industries which collapsed in the 1990s; since the attitudes of their leadership changes very slowly (from the old pedagogic style to the new managerial style), they were not able to meet challenges very quickly. The No. 109 Secondary Vocational and Vocational Training School was the main vocational training school of Hajdú-Bihar county, which has a lot of sub-vocational training schools. During the 1980s these sub-schools became separate and the No. 109 School has worked independently since 1993. It launched its secondary vocational classes in 1990 and its special classes in 1992. Now they have 900 apprentices, compared with the 1,400 to 1,600 in the 1970s and 1980s. In addition to the apprentices, they have 230 pupils in the secondary vocational school and 100 in special classes. Enrolment in the No. 108 Secondary Vocational and Vocational Training School is also decreasing, with 46 classes - 1,500 pupils - instead of the 56 they had before. Enrolment is decreasing in the Secondary Vocational and Vocational Training School for Light Industry in Debrecen, which now has 1,300 pupils.

The Beregszászi Secondary Vocational and Vocational Training School does not have problems with enrolment. The school now has 1,900 pupils - 500 in the secondary vocational school and 1,400 in the vocational training school. One thousand of them are traditional apprentices, while 400 came for qualification after grammar school. Enrolment in traditional apprentice training has decreased (but only by 6 per cent), while secondary vocational education has increased by 68 per cent compared to two years before. The Irinyi Secondary Vocational and Grammar School has only 800 pupils - 200 of them are apprentices, 500 pupils in the secondary vocational school and 100 in the grammar school. Two and a half times more children applied for admission in the World Bank classes than the school could admit, and three times more applied to the grammar school. The headmistress of the Csepel Secondary Vocational and Vocational Training School was dissatisfied with the quality of enrolment but not with the quantity. Enrolment in the section specialized in the textile industry decreased from more than 400 to 300, while enrolment in the catering section has increased from less than 400 to 500. They now have 1,000 pupils, including the 200 in special classes.

The following chart shows how the number of pupils has changed since 1988 in the Csepel Engineering Secondary Vocational and Vocational Training School. One can see that the number of apprentices at the vocational training school was greatest in 1991, which was a very critical year in vocational education due to the demographic boom and the recession (see the first chapter of this study). But this number later began to decrease. The total number of pupils increased due to the increasing number of pupils in the secondary vocational part of the school. We can generalize that as enrolment in the vocational training schools is decreasing, only those schools that can expand by introducing secondary vocational classes are able to survive.

Table XXIX. The changes in the number of pupils in the Csepel Engineering Secondary Vocational and Vocational training school between 1988 and 1993



Source: Statistics of the Csepel Engineering School

In addition to the changes in the number of enrolled pupils, another indicator of whether a school is innovative or not is the kind of changes they were able to implement. These changes usually affect the structure of the school and its specialization. (Many things also changed in the field of practical training. I will touch on this subject later.)

As the names of the schools suggest, simple vocational training schools are a thing of the past. Almost every vocational training school has introduced secondary vocational classes as well; one school on the list also has a grammar school, while another school is a joint primary and vocational training school. The picture of vocational education is like a kaleidoscope. As a result of the transition period, schools struggling with the economic recession and demographic fluctuations had to change to survive. Usually the vocational training schools launched secondary vocational schools - often to get more prestige - but vocational training schools very rarely change their specialization.

The more innovative ones, like Gábor Baross Primary and Vocational Training School and the Beregszászi School, started IPOSZ classes and the Irinyi school started a grammar school. Some years ago the Csepel Secondary Vocational and Vocational Training School for Textile Industry and Catering was specialized only in the textile industry but, anticipating the collapse of textile industry, was able to change in time into catering, and now works very successfully. The less innovative schools, like No. 108 and No. 109 Secondary Vocational and Vocational Training Schools and the Secondary Vocational and Vocational Training School for Light Industry in Debrecen contented themselves with starting secondary vocational classes in the same trade. However this strategy does not seem sufficient, since enrolment in these schools is decreasing while in the others it is increasing or staying the same.

The most successful schools are those which could answer the special demands of the environment and the market. The number of pupils applying to the Gábor Baross Primary and Vocational Training School in Southern Pest was six times higher than the school could admit. Since there was no any vocational training school there before, there was a great demand for it. On the other hand, it was good for the school, because the number of pupils in primary school was decreasing and the school was threatened with closure. The primary school was built for 600 pupils but now has only 200. But the school could survive with 300 more apprentices in the IPOSZ classes. The other successful schools are the Irinyi and the Secondary Beregszászi in Debrecen. The former launched a grammar school and has a World Bank model secondary vocational school, while the latter is a so-called World Bank model school. These forms offer a more general education but give qualification as well, which is very popular among the parents because it shelters the children from unemployment.

It is also interesting to note that special technical classes (offering two years training after primary school but without giving any qualification accepted by the labour market), established to channel the surplus from the demographic boom, exist only in the schools in less favourable positions, such as the No. 108 and No. 109 Vocational Training Schools, the school specialized in light industry in Debrecen and the Vocational Training School for the Textile Industry in Csepel. It seems that having IPOSZ classes and World Bank classes increases the prestige of the school, while having special classes for disadvantaged children decreases it. Of course the most innovative schools which entered the World Bank programme usually were lucky in that the trade they were specialized in did not collapse. As the representative from the self-government explained:

> 'These schools are the most innovative ones; they were good schools before, too. They got the structure ready but filled it with substance. The pedagogical innovation was unique, the teachers themselves produced the curriculum.'

As we can see, the simple vocational training school has almost vanished and now in the same institution we find a special vocational school, a vocational training school, a secondary vocational school, and even a grammar school or a primary school. Vocational schools tried to expand to survive the recession and the demographic fluctuations. Vocational training schools have introduced secondary vocational classes since 1978. Now most of the vocational training schools also have a secondary vocational school. Many of the vocational training schools started secondary vocational classes specialized in computers because this does not demand big workshops and much equipment, and is popular among parents and pupils.

But how indeed could schools implement changes? The more innovative and informed leaders of vocational training schools took into consideration the demands of the market when making their plans for introducing secondary vocational education. According to the headmaster of the Beregszászi school:

> 'The staff decided to start secondary vocational education in 1988... We selected the areas where we could deal with secondary vocational education. The most important thing was to avoid introducing vocational education in those fields where training already existed. We didn't want to compete with the other schools and didn't want to produce a surplus in the labour market. The other fact determining our decision was the structure of the already existing training at our school. We spent two years establishing the material and conditions and introduced secondary vocational education in 1991/92.
>
> 'Practically, we established a flexible educational system in our school, where we are following closely the expectations of the surrounding industry so we can react quickly... There were not enough applicants for our new electric technician tracks, so we completed it with other tracks and enrolled pupils alternately for one year in technician classes and the other year in World Bank classes.'

The Irinyi Grammar and Secondary Vocational School is also one of the more innovative schools, where the development of the school adjusts to the demands of the environment.

> 'The grammar school was not introduced against vocational education, but on the contrary for vocational education, since pupils can look around within the schools and choose from among the trades. This is easier than luring the pupils from other grammar schools... Training in the food industry was overspecialized... so instead we started World Bank classes giving general education, where specialization will take place after the baccalaureate. The poorly performing pupils can choose apprentice training after the second year. They are trained according to the demands of the region in the meat, milk and milling industries... Our overspecialized courses, such as training technicians in the milk and conserving industries are vanishing.'

The less innovative schools did not make many structural changes in their education. Although the No. 109 Vocational Training School introduced secondary vocational classes it did not change the structure of its training, despite the fact that the metal industry in which this school is specialized was severely affected by the recession.

> 'In recent years we tried to surmount the closing of the workshops at firms by starting so-called classes without practical background and trained the apprentices in our school workshops for three years.'

I did not find any vocational training school in my sample where training in any trade should have been stopped due to the recession. Despite the fact that the metal and textile industries have almost collapsed in Hungary, training in these professions did not disappear. Even if there are only four or five students training continues. This indicates the relative power of the institutional interests for survival.

Only a few vocational training schools chose to change their specialization, since the procedure of licensing is very long. Because of the complex management system, in order to implement significant changes at schools one has to obtain permission from the Ministry of Labour, the Ministry of Education and the self-governments as well as the agreement of the tripartite body. One could say that only those who started at the beginning of the transition period managed to change their specialization.

The Csepel Secondary Vocational and Vocational Training School for Textile Industry and Catering is one example. It originally specialized in the textile industry and mainly trained girls from the eastern part of the country to weave, spin and knit. Since the textile industry was one of the first industries that was shaken by the collapse of the Eastern European markets, the school was soon faced with the closure of the workshops at the dying textile factories. To save her school the enterprising headmistress had the idea of changing the specialization to catering:

> 'It was very hard to have it accepted that a vocational training school specialized in the textile industry change to catering. They did not believe that it could succeed or they thought that our idea was to retrain the unemployed teachers in the textile industry. But this is not the appropriate way to do it. I had to recruit teachers from restaurants, hotels and from the university who were specialized in catering. The number of the staff specialized in the textile industry decreased... We started the licensing procedure at the very beginning of the change of regime. Nobody could go through with it today. The classrooms and the textbooks must be available, and if it is a new specialization one has to have the approval of the special ministry, the approval of the Ministry of Education, the opinion of the trade unions, the permission of the self-government... The other vocational schools in catering did not take it seriously. We nearly failed with this experiment but we struggled intensely and managed to establish the necessary conditions. Our greatest success is the connection with the Kempinsky Hotel. When this hotel started to function the manager visited all the vocational training schools and asked for ten apprentices. He said that he would choose the school where the form of education met the requirements of the hotel. In the end he chose our school because the quality of the training and the form of the education was appropriate. Since the owners of the hotel are German, the nine-class form, which is one year of academic education and two years of continuous practical training, suits them.'

This vocational training school had the courage to change. First to introduce the nine-class form[12], which was a new form to channel the surplus of the baby boom generation entering the secondary schools in the 1990s. Also, by making this first step, they succeeded in their second experiment and could change from a poor vocational training school for the textile industry into a popular vocational school for catering.

Before showing what happened in the field of practical training I would like to introduce two other new institutions of practical training.

4.3.2 Training enterprises

The training enterprises are a new phenomenon of the transition period. They were usually established from the training division of the big State companies, after they had broken into smaller enterprises. One of these is the Training Company of the Csepel Works. The Csepel Works split up in 1983. One part of it was the Power Station of Csepel, with a training group where apprentices were trained in three trades. But this was expensive, so the firm had to decrease the number of apprentices from more than 500 to 250. In 1990-1991, the power station could no longer finance training, so the teachers of the training group had to find a way to save their jobs. The Training and Retraining Ltd. of the Csepel Power Station was established in 1992. Ninety-six per cent of it remained the property of the power station, the other four per cent was owned by the members of the limited corporation, i.e. by the ten teachers working there. Training costs the works 10 to 15 million Fts a year. Buildings and technology were given free-of-charge to the training enterprise by the power station, but it had to pay for the other services, such as energy, water and food. The school can afford this since training enterprises were in a very advantageous legal position. Each enterprise dealing with the initial training of apprentices could get State support per head (normative), as could the vocational schools. Furthermore, since they are economic organizations with legal status, they pay 1.5 per cent of their payroll into the Fund for Vocational Education, and in exchange, they can claim back the wages and other costs of training from the Fund. The third source of income of these enterprises comes from the fact that they provide training for unemployed people, which is paid by the Labour Centre. A fourth - and very important - source of income comes from selling their products and services below the market price, drawing a profit from the cheap labour of the apprentices.

The lobby of these enterprises gathering practical teachers from the former large companies is quite strong. They can protect their interests without taking part in the meetings of the National Council of Training. For example, in 1992, when the Parliament did not want to give more State support to these enterprises, their representatives negotiated directly with the government and managed to modify the budget. They got State support until August 1993 and, after that, half of the amount which was given to the schools in the case of practical training (20,000 Fts per apprentice). They also negotiated to be able to claim back other kind of costs, such as fees for energy, rent, costs of tools, etc., in addition to the costs fixed in the Law on the Fund for this kind of training enterprise. The amount that can be paid back is decided by the National Training Council. The power of these limited corporations lies in the fact that they provide training for 8,000 to 9,000 pupils in the country.

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[12] In the first year, pupils at vocational schools learn academic subjects. This is very popular because then in the first year of vocational training one does not need a place for practical training. On the other hand, according to the practical teachers, students at 15 are more mature for practical learning.

The Training Ltd. in Csepel was so successful that in September 1992 it had 356 apprentices, in 1993 it had 632, and in September 1994 it will probably have 758. They are trained in 21 trades. There are four branches - metallurgy, construction, electricity and a mixed one. They co-operate with the vocational training schools. Academic and theoretical education is provided by vocational training schools, and the private training enterprise offers practical training. One of its most important partners is the Csepel Engineering Secondary Vocational and Vocational Training School, where I conducted an interview.

4.3.3 Training Centres

We can include in the VET system the Regional Manpower Developing and Training Centres, which are training and retraining centres. They were inspired by the Irish model and are built with the help of a loan given by the World Bank. The first one began functioning in 1991 in Miskolc, in the northern part of the country, which was seriously affected by the recession. Ten to twelve centres are planned, which could guarantee the training of 20 to 30 per cent of the unemployed. In addition to training, the centres help set up enterprises, to contribute to self-employment. The first experiences in the Retraining Centre in Miskolc show that 90 per cent of the participants of the courses were younger than 40, and half of them did not have any qualification. A follow-up of the graduates showed that 60 per cent of them could find a job after six months. In addition to the centre in Miskolc, new centres were established in 1993 in Pécs, Debrecen and Székesfehérvár. These centres are founded by the Ministry of Labour and the self-governments. They can result in co-operation but also cause tensions between the government and the municipalities. All the centres are regional centres and have to focus on the labour market demand of their own territory.

The financing of these centres also differs from the traditional means of financing. The State support covers only the smaller part of their budget. The greater part must be covered by their clients, such as Labour Centres, or employers. The retraining centres have to guarantee the employment of their graduates.

The aim of this centre is to offer courses to meet as quickly as possible, the demands of the market. But this flexible institution of labour market training can be regarded as part of vocational education, because young people are more willing to take part in any kind of training than older ones. Since many of the young, unqualified unemployed can get their first qualification in these institutions, these centres may give initial training as well. Moreover, the new Act on Vocational Education deals with these institutions, aiming to unify the regulation of training at the schools and in the labour market.

As concerns training centres, both Debrecen and Budapest are interesting cases. Although these centres are usually created by the self-government and the Ministry of Labour, things happened differently in Debrecen. The role of the self-government in establishing a centre is to provide a place for it. The self-government of Debrecen did not want to give a place, as they believed this institution to be unnecessary since its tasks can be performed by the vocational schools in the town. So the Ministry of Labour bypassed the self-government and found a place in Debrecen which was the property of the Ministry of Industry and bought it. The Training Centre was built there and stirred up local interest in training. Most of the schools do not like it and regard it as a rival. The most reasonable schools and the self-government now try to take advantage of the situation and are making efforts to co-operate with this institute.

Opinions differ on the training and retraining centres (the official name is Regional Retraining and Developing Centre of the Labour Force) and illustrate the critical points of the management system of vocational education and of the functioning of the market in Hungary. The representative of the self-government in Debrecen now regards it as a good opportunity. According to him, the self-government co-operates with the centre and avoids developing parallel training capacities. The two types of training institutions - the vocational training schools and the retraining centres - complement each other. Sometimes teachers from schools teach at the centre, sometimes a course from the centre is placed in the school. But not all the actors share this opinion about the training centre.

The self-government of Budapest also has doubts about the necessity of the retraining centres, especially because there is space in the vocational training schools. But they found a better solution, as did the self-government of Debrecen. They did not hinder the Ministry of Labour as they did in Debrecen. Instead they appeared before the Ministry, and in 1993 established a Centre for Intervening from a PHARE grant, in co-operation with the Ministry. The primary target of this institution is to retrain unemployed people and to adjust supply and demand in the labour market. The advantage of this construction is that it came from an interest-free grant, whereas the retraining centres in the country have been established by credit given by the World Bank, which has to be repaid. The other advantage of the Centre for Intervening in Budapest compared to the retraining centres is that it is an information centre that tries to take advantage of free space at the vocational schools, so courses are held at schools. The school leaders and the teachers were less enthusiastic about the centre. As the representative of the self-government of Budapest told me:

> 'The self-government of Budapest and the Ministry of Labour have jointly established a centre in order to use the free capacities of vocational schools for retraining... The self-government recognized this interest earlier than schools did. Even today the schools cannot cope with the fact that they have to compete with economic organizations under the same conditions - that there is no winter holiday, that the manager of the school or the leader of the school has to offer jobs to those unemployed who have finished the course at school.'

While the entrepreneurs are against these institutions, the schools' opinions differ, depending on the chances of the school. If it can take part in the work of the Training Centre and make any use of it, then it accepts it. But if the Training Centre is not to the school's advantage, then the school considers it as a rival institution that snatches the money given to training away from the budget. The more innovative schools, such as the Beregszászi school in Debrecen, have already applied for money to train jointly with the retraining centre, while the less innovative schools, like the No. 109 Vocational Training School, is against this.

The small-scale entrepreneurs and craftsmen are against the centres because they do not employ them but rather special instructors to train unemployed people and to meet the special needs of employers. For them this institution seems to get special treatment from the government. The representative of the local IPOSZ who participates at the meeting of the VET Council at the county level was shocked when the retraining centre was mentioned in our interview:

> 'We had to judge applications (to get money from the Fund for Vocational Education) at the last meeting and the man from the Labour Centre declared that 30 per cent of the sum would go to the retraining centre. Of course he had to say that, but I question even the existence of this training centre.'

It is clear that the main reason for the clash of interests is that both the training centre and IPOSZ must share one cake. The vice-mayor, the representative of the IPOSZ and most of the school leaders in Debrecen said that the money transferred to the training centre would have been spent on the already existing vocational training schools, to help them develop - omitting the bad traditions and building on the good ones. The debate on the issue of the training centre highlights the work of the tripartite forum of vocational education at county level.[13] As the representative of the local IPOSZ in Debrecen said:

> 'We immediately went on record to say we didn't agree that all the applicants must produce a kind of certificate except the training centre, for which it is enough to certify only that the client visited the institution. There was agreement on this question between the employers' and the self-government, but the government didn't need our approval for its decision.'

It is clear that this council has limited competence and can make decisions only on how to distribute certain amounts from the Fund among the applicants. Its work often seems to be formal, and one can see the dominance of the government, as in the case of the National VET Council. The government plays the leading role in vocational education at the middle level as well, and employers play second fiddle to them, while trade unions seem to have no role at all.

The fog surrounding the centre would be cleared up if we had more information about its work. The more sober actors in the field try to take advantage of the existing situation, and try to co-operate. The more innovative schools, like Beregszászi or Irinyi, co-operate with this institution, applying together for money from the Fund for retraining. The less innovative schools, like the No. 109 Vocational Training School, with less chance to take part in retraining, are very hostile towards the retraining centre, saying that all the trades trained by the centre could have been trained at the vocational training schools.

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[13] This is similar to what I wrote about the National VET Council earlier in this paper. The representative of the Government (from the county's Labour Centre), the representatives of the employers and trade unionists are its members. The task of this council is to distribute among the competing schools, training centre and educational enterprises the so-called 'decentralized part' of the Fund transferred to them by the National Council.

4.4 Problems of practical training

Schools differ not only in their enrolment figures and the structural changes they could implement but also in the way they perform practical training.

4.4.1 Conditions and places of practical training

As the large State companies collapsed and could not maintain their workshops, schools had to find new places for practical training. The headmasters or the parents had to look for firms, and masters ready to undertake practical training. The managerial-type school leaders tried to contact firms and enterprises to inform them about the vocational training school, and tried to find ways for co-operating with the other actors in the field. Headmasters interested their practical teachers in using their connections to obtain places for practical training. The most innovative vocational training schools employed some kind of manager for this job. The less innovative vocational training schools insisted on the old structure. In spite of this, these schools managed to survive, with help from the self-government and the Fund.

Let us look at the solution of the self-government in Debrecen to this problem. According to the representative of self-government, the situation is more difficult in Debrecen than in the other regions:

> 'The problems of practical training are more serious in Debrecen than in the other regions because there were few industries here and industrialization affected only some sectors. Vocational education was based on the workshops at firms, but they disappeared in a year - places for vocational education and training vanished. We tried two things. One was to develop qualitative programmes suited for schools which didn't require new buildings, only equipment. The other solution was to collect information on workshops at firms established by the Fund for Vocational Education and take it out of the firms being privatized or under bankruptcy proceedings. Naturally we backed these workshops through the budget of the self-government. The municipality spent more than 100 million Fts on preservation of the workshop structure.'

In Debrecen they did not follow the usual path. They established a so-called 'municipal workshop basis' belonging to the self-government. This means that the self-government did not transfer the workshops to the school but kept them on its own property. The workshops are managed by a curatorium. The schools contract with the self-government to use them, which means that they can use these facilities free-of-charge for a certain time. The main goal was to run the workshops efficiently, to exploit all their capacities. The self-government can contract with two or three schools to use one workshop. The other reason is that:

> 'The use of school workshops is strictly regulated by law. But if the workshops are owned by the self-government, entrepreneurs and economic organizations can be involved in vocational education. The advantage of the workshop basis is that it can contract both with schools and entrepreneurs, so it works as a workshop and as a normal enterprise at the same time.'

The best example for this is the Beregszászi vocational training school, which runs a very successful service station at the workshop. This example demonstrates that even innovative schools need the help of the self-government. When the Beregszászi school decided to start secondary vocational education, in addition to vocational training, in the early 1990s, it had 27 workshops at firms. Unfortunately, these workshops had to be closed down during the transition period, so the school remained without places for practical training. The self-government helped them by making three of the six municipal workshops available for the school. Schools and self-government kept a watchful eye on the future of the workshops at firms established by the Fund. As the headmaster of the Beregszászi school said:

> 'We did not lose even a screw. In 1993 the equipment of six workshops at the firm were transported to our workshops... We were watching the closure of the workshops and did not let any State property get lost.'

In Budapest, the self-government's opinion is slightly different. They did not create a common workshop basis (which is understandable considering the huge number of schools they have to maintain), and although they established many workshops, allocating them to the schools directly, they are considering giving them to private employers.

> 'The demographic slump has just now reached the secondary schools, so we have to let the retraining courses in the school. This is in harmony with the interests of the economic organizations that want to take part in training. We would give them the chance to hold courses in the jointly equipped workshops.'

4.4.2 Mode of practical training

Regarding the mode of practical training, there are more differences between the vocational training schools than between secondary vocational schools, since apprentice training has more variations, depending more on the economy than secondary vocational education. The latter is strictly school-based vocational education, where the number of hours of practical training is lower and is usually performed at school workshops. Nevertheless, one can see more forms for it. As for apprentice training at vocational training schools, the less innovative ones continue training in the traditional manner, i.e. one week theoretical education at school, one week practical training at workshops or individually with craftsmen (this latter being a kind of on-the-job training). Those vocational training schools got in a state of crisis when the firms where their practical training was placed collapsed and the leaders of the school could not find ways of co-operating with the private enterprises. In Csepel, the crisis of the textile industry and of the Csepel Works caused problems in the work of the vocational training schools in Csepel. The cloth industry in Debrecen went bankrupt, so the vocational training school specialized in light industry had to look for places for practical training.

However, privatization turned out well in some firms considering training. Although the preserving factory in Debrecen has split up into five private companies, these smaller enterprises are co-operating with the Irinyi vocational training school. The No. 109 Vocational Training School in Debrecen was not so lucky. There was a period when it had to perform its apprentice training at its school workshop, although this contradicts the principle of apprentice training, which is to train apprentices at places connected directly to the world of work. Now the situation is improving, since craftsmen have appeared to train the second- and third-year apprentices. The training is traditional, that is, one week of practical training and one week of theoretical training. The apprentices in the first year got their basic practical education at school, but, from the second year, if there is a place, they go to craftsmen for training. In case the craftsman needs apprentices from the first year, then he or she can train them from the very beginning. The training is traditional in the Light Industrial and the No. 108 Vocational Training Schools in Debrecen. All of them were helped by the self-government through the municipal workshop basis, i.e. they can rent workshops from the self-government free-of-charge for those apprentices, for whom they cannot offer a place for practical training, neither at the school workshop, nor with craftsmen.

The training in IPOSZ classes differs from traditional training. The academic part of education is concentrated in the first year. After that, apprentices spend only one day a week at school and four days with the craftsmen. The Gábor Baross Primary and Vocational Training School in Budapest introduced the apprentice contract signed by the IPOSZ, the master, the parent and the headmaster. Although the institution of apprentice contracts exists in the new Act on Vocational Education, it is still very rare. In Debrecen, IPOSZ classes have been launched in the following trades: motor mechanic, hairdresser and bricklayer. Debrecen was one of the first places where this kind of training was started. The graduates of the first IPOSZ class completed their training in June 1994. Unfortunately, precise information is missing on this subject, as on others. Since membership in IPOSZ is not obligatory, details are not registered, and the representative of the IPOSZ in Debrecen could not give any information about the number of the craftsmen dealing with training or the number of apprentices in IPOSZ classes. As for schools, they usually have to keep in touch with more than 100 small-scale entrepreneurs. This makes collecting and controlling data very difficult.

There is another form of apprentice training, which is very similar to the one done by the IPOSZ - so-called intensive training. It is actually an introduction of the ninth class and so a step toward the new educational Acts. In the first year, the students receive academic education, which is a kind of extension of primary school (that is why it is called the ninth class). From the second year, there are four days of practical training alternating with six days of theoretical training, and in the third year, eight days of practical training alternating with two days of theoretical training. This form of training is present at the vocational training school specialized in the textile industry and catering in Csepel as well. It is interesting to note that more schools are thinking of introducing the ninth and tenth classes before the Acts take effect. In spite of the fact that this is the trend taken by the educational act, there are a lot of obstacles in its way. As the headmaster in the Beregszászi Vocational Training School said, it had failed because of the resistance of the economic organizations. The enterprises want apprentices as soon as possible and do not want their apprentices to stay too long at school. In the case of the Vocational Training School for the Textile Industry and Catering in Csepel, the introduction of the ninth and tenth classes failed because of the slow decision-making process of the self-government of Budapest. But as the headmistress suggested, the reason might have been the aversion of the politicians to the new educational Acts. (It is quite interesting to note that the most successful in introducing the nine to ten classes proved to be the relatively less innovative No. 109 Vocational Training School in Debrecen, where they will be able to start this form in two classes in the next school year.)

In those schools where many forms of training exist there is a greater opportunity for experiments. In the Irinyi Secondary Vocational and Grammar School there is no apprentice training in the first year. This form exists only as a 'branch' for those pupils who are not able or do not want to continue secondary vocational education after the first two years. These pupils can continue their education in the apprentice classes for two more years. This means that instead of the traditional three-year apprentice training it offers a 2+2 form. In the Beregszászi vocational training school in Debrecen, general education is offered in the secondary vocational classes in the first year just to postpone tracking and to avoid the choice of an inappropriate career. If a pupil has poor results he or she will be directed to apprentice training. The situation is similar at the Csepel Engineering School where the first two years in secondary vocational school are consolidated. At the end of the second year, both schools examine their pupils. In the case of the Csepel Engineering School, the result of this examination also orientates the tracking into the separate specializations. It should be noted that this kind of examination, called a basic exam, is also a part of the new educational acts. This is another example of life coming before the law.[14]

4.4.3 Controlling practical training and its quality

Although the picture of practical training is colourful, it makes control extremely difficult, especially in the case of the individualized forms of training (such as training with craftsmen and IPOSZ classes). The IPOSZ does not control the quality of training offered by its members. The practical teacher at the school is responsible for supervising the activity of the masters, but this usually means one or two teachers for more than 100 craftsmen, which is impossible. So in fact individual forms of training of apprentices are uncontrolled. As the representative of the local IPOSZ said, control was better during the previous regime when membership was obligatory:

> 'According to the new Act, masters dealing with training have to have some pedagogical knowledge, but the craftsmen are dissatisfied, saying that they would rather give up training than sit somewhere to get the necessary pedagogical certificate. I think this is important, because masters not only train apprentices but educate them, too... But now, after having obtained the skilled workers' certificate, one can launch an enterprise in a few months.'

According to her, this situation can be resolved if the new chambers set up and supervise training. But until then, there is a long transitional period.

At the vocational training schools, the control of practical training is the responsibility of the practical teachers. In the case of individual training with craftsmen, the practical teachers of the school have five or ten apprentices to look after; he has to visit them weekly or every second week where they are being trained. They talk to the masters, look at the apprentices' work, and examine the work diaries of the apprentices. These diaries, in which they record what they have done every day, must be kept by the apprentices. But in fact, schools have little power to control training. Since, according to the Act on Vocational Education, it will be the task of the new chambers, not much effort is being made; instead the schools say that control of the masters will not be their responsibility.

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[14] The integration of several types of schools, like the joint grammar and secondary vocational school, or joint secondary vocational and vocational training school, or joint vocational training school and special school, is a good opportunity to decrease the drop-out rate, since the pupils failing on a certain level can be directed to a lower one in the same school.

4.4.4 Internal and external efficiency of practical training

As we saw in the first part of this paper, the drop-out rates in the vocational training schools are high in Hungary. By integrating more forms of training, schools can alleviate this rate by offering another route to the low achievers instead of kicking them out. The headmaster of the Beregszászi vocational training school in Debrecen looks at it differently:

> 'At the end of the 1991-92 school year, the number of drop-outs was 100 to 150, that, is the equivalent of five classes. One year later it was only 60 to 70, which amounts to two classes. This is a great improvement, but I do not think that it is due to our tracking system. Attitudes have changed, teachers are threatened with unemployment... So they had to make a great effort to educate the pupils, because if they automatically fail them, the pedagogues will be out of a job.'

In the No. 109 Vocational Training School in Debrecen, the drop-out rate is only five per cent, but, according to one of the practical teachers, it should be 10 to 20 per cent. The reason for the low rate is:

> 'The families with unemployed parents need the school, since they can get social benefits such as family allowance or other support if they have children at school.'

At the Training Ltd. in Csepel, 30 or 40 apprentices out of 180 cannot directly sit the skilled workers examination. The drop-out rate differs according to trade. There are fewer drop-outs among the welders and other fields in the metal industry than in those occupations where one works outside, such as painters or bricklayers.

> 'Many children see how much money workers in these trades earn at the week-end, but they do not see that these workers worked from six in the morning until seven in the evening.'

When I asked my interviewees about the future of the apprentices, the school leaders said that they had exhausted themselves trying to find places for practical training. The other problem is that getting any information on school-leavers after they have left the school is very difficult. Some schools tried to send questionnaires through the post, but they did not answer. Information is occasional; teachers may learn something if they meet them in the street or at a workplace, or if graduates bring their own children to the same school.

The vice-mayor told me he thought this question was very naive. The self-governments have programmes with the Labour Centre to retrain unemployed people; especially the young unemployed can be employed in a number of communal work programmes. According to him, this indirectly provides some information about the school-leavers. According to IPOSZ, practically speaking, one cannot make use of the data and the charts of the Labour Centre.

> 'The situation is ambiguous. The entrepreneurs are complaining that there is a shortage of manpower, that despite unemployment they cannot employ workers. I had a job opening and unemployed people came to me with a paper from the Labour Centre asking me to certify that I couldn't employ them, because they had to prove that they were trying to get a job to be entitled to the unemployment benefit.'

The director of the Beregszászi Vocational Training School also believes that the figures of the Labour Centre are not adequate for drawing any conclusion:

> 'The Labour Centre already has information on unemployed people according to their occupations, but they are not distributed according to their ages and to the places where they got their qualifications. The problem is that there are 90 unemployed motor mechanics in the county, but I do not know whether they were trained here or in another vocational training school in the country.'

According to the headmistress of the Irinyi school, it is hard to follow the future of their school-leavers, because many of them move to other regions. The wages in the conserving industry are so low that nobody wants to work there. But there is one profession where all school-leavers could get a job, i.e. the baking industry:

> 'The baking industry offers good opportunities. It was quite easy to change from the large-scale baking industry into the little bakeries. We already saw in the late 1980s that apprentices should not be trained only for the large-scale industry. Our graduates are employed in every bakery in Debrecen.'

4.5 Relationship with the economy, financing and motivation of economic actors to take part in training

Most of the vocational schools have connections with enterprises and companies in two ways. Since it is permitted by the Act on the Fund for Vocational Education, many companies give money or material directly to the vocational training schools. On average, the vocational training schools get money from 20 to 30 companies and enterprises and the schools in my sample could obtain, with the help of the Fund and the companies, 8 to 10 million Fts a year. Large companies give 1 to 2 million Fts, but even small-scale entrepreneurs, especially if they are parents, offer 10 to 20,000 Fts to schools. The other connection that schools have with enterprises is in the field of practical training. Most of the schools have to keep in touch with a wide circle of craftsmen - 100 to 200 - offering practical training to their apprentices. That can be explained, as I did earlier, by the boom in craftsmen trades and private enterprises which led to a renaissance in individual training with masters, but which makes control of practical training very difficult.

It is also very common for the vocational training schools to run enterprises themselves, but there are big differences between them. All schools are compelled to do business by the self-government to supplement their budget. But enterprises have varying degrees of success at schools, depending on the innovative capacity of the school and the headmaster. The less innovative schools only have a shop at the school, where the products of the apprentices are sold. The most innovative ones, like the Beregszászi Vocational Training School in Debrecen or the Csepel Engineering School, use their workshop as an enterprise. The headmasters employ skilled workers and part of the profit is distributed among them, and the other, larger, part is reinvested in the school.

It is interesting to note that the more innovative vocational training schools do not have school workshops; if they do, they conduct a certain number of business in it. The Gábor Baross School in Budapest does not have a workshop, since training is going on with craftsmen. Nor does the Irinyi Secondary Vocational and Grammar School have a school workshop. The headmistress is proud of having their workshops only at firms because, according to her, this shows that her school is prospering.

Financing is the most critical issue the schools and self-governments have to struggle with. The portion from the State budget is not enough for the maintenance of the school, so self-governments must add money. The quota transferred from the State budget to self-governments is not enough to maintain the schools. Self-governments must pay 30 per cent of the costs of the maintenance (building, wages and other fees), but to build new schools - or even develop the old ones - or to buy equipment, they need more money. Self-governments apply for money from the Funds, as well. But, according to the representative of the self-government of Debrecen, the situation is critical:

> 'The municipality is running into debt. This must be solved through the national budget. We need programmes to manage the crisis, and they must be financed from the State budget.'

To ease the financial problems of the self-governments, schools are expected to generate tax-free income up to 1 million Fts which can be spent on development.

Although the money from the State budget to the self-governments is calculated per pupil, the self-government does not have to distribute the money to schools in proportion to the number of their pupils. For example, when the self-government of Budapest makes a decision on distribution of resources among schools it takes into consideration the state of the buildings and the schools' own expected income.[15] As the representative of the self-government of Budapest said:

> 'It is not popular, but when we decide how to distribute the budget we take into consideration that one school has 5 million Fts income while the other, let's say a training school for medical assistants, hasn't any.'

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[15] The self-governments usually do not take into consideration the external efficiency of the vocational school. Firstly, they do not have data about how many school-leavers from a certain school found a job, and secondly, as they told me, even if there were data they would not use it because they thought the performance of schools could not be measured by this information. As for internal efficiency, self-governments take into account information such as the results of the students at the competitions when they evaluate the work of the leader of the educational institution.

But most of the self-governments are willing to differentiate only slightly between their schools in financing. As the representative of the self-government in Debrecen said:

> 'There is big resistance to it... We lose money on primary education, we lose money on vocational education, so from that point of view general education is relatively cheap, and we can take money away from that field. But then grammar schools cannot get the necessary resources for qualitative development.'

That differentiation does not mean rewarding the good performers but it is a kind of redistribution among schools, demonstrated by the headmistress of the Irinyi Grammar and Secondary Vocational School:

> 'We have never received the prescribed State support. We get less than a million Forints than we should fairly get. I guess the reason is that the self-government knows that we are backed by a lot of companies. But it is unfair, because we spent a lot of energy establishing good industrial relations. That means co-operation, but we have much more work since we have to contact a lot of little enterprises.'

Most of the State support is used for salaries. As the leader of the No. 108 Vocational Training School said:

> 'Our budget seems to be very large - 100 million Fts. But 58 million from it is spent on wages... This year we had to cut three per cent off salaries and, what is more, our budget has been decreased by 14 million Fts. It is sure that this will not be enough.'

Since the money given by the State and the self-government is not enough, schools have to conduct their own business as well. This can be adult education, retraining, letting buildings or rooms out or running enterprises at school workshops. Part of the income is spent on the school - for example, the Beregszászi school spends 30 per cent of its revenue from retraining and adult education on school equipment and reinvests 70 per cent of the income of the school's enterprise in the workshop (a car service station). The less innovative schools try to take advantage of the cheap labour of apprentices and sell their products below market price. The more innovative vocational training schools like the Csepel Engineering Vocational Training School or the Beregszászi Vocational Training School took another route. As the headmaster of that school said:

> 'We have a big hall and we were thinking of providing some services. A lot of schools do that, the school leader instructs the practical teacher to get orders from outside and the apprentices do the job. But it makes the clients nervous if they see a lot of children standing around their car. They think 'What will they do with my car?' What is the solution, then? We rejected this form of enterprise and employed ten skilled workers. We divided the workshop into two parts. One is called the 'cabinet', where the basic training is carried out for the first-year apprentices, but the second- and third-year apprentices work with the skilled workers at the service station. The masters take responsibility

> for their work... We said that if a client came back twice or three times to a master because the car had not been repaired well, then this worker must go. The failure of a master comes to light sooner than that of a teacher... We had to exchange more than the half of the staff of the service station, but now we have a high quality of skilled workers and masters, which is very important for our apprentices.'

According to the headmaster of the Csepel Engineering Secondary Vocational and Vocational Training School, attitudes must be changed. Previously, training was focused on factories. Now, as the means of production have changed, training has to follow the changes and prepare apprentices to enter enterprises.

> 'The workshops were built according to the previous system, as a model of a factory. The whole process of work was strictly regulated. This organization must be eliminated, because it was not able to accomplish anything... I radically decreased the number of the staff at the workshop and employed a managing director to organize the work and to get orders that bring money to the school.'

It is interesting to note that in those few institutions of vocational education where a kind of managerial post was created, it was filled with somebody from the staff of the school, since they could not afford to hire an economist. An enterprising practical teacher or one of the book-keepers is sent on a retraining course to acquire the necessary skills. The innovative headmasters act as managers as well. Problems arise when school leaders cannot get away from their role as 'old-fashioned pedagogue school director'.

Another problem with school enterprises, as in the case of the training centre, is that they might cause unfair competition, taking advantage of State support and underselling in the market. The headmaster of the Csepel Engineering Vocational Training School agreed that entrepreneurs are not happy when schools appear in the market, but there are fields where schools can perform the job.

> 'Our school has up-to-date equipment, because there was a period when we could buy machines with the help of the central budget, and we can do work with these machines that a small enterprise is not able to do. They cannot invest money for it. There are such jobs where one has to do 15 or 20 or 30 pieces, and it is not reasonable for an entrepreneur. It is cheaper if it is produced at the school workshop.'

Another source of financing for the schools, besides State support, self-government and their own enterprises, is the support by firms. As we have seen, the most popular way for firms to give the obligatory contribution to vocational institutions is to give it directly to the school. According to the headmistress of the Irinyi school, the size of this support illustrates the links between the economy and the school:

> 'The relationship of the leadership of the school and of the staff to the economy determine fundamentally the financing of the workshops and their future. We co-operate with the market more than the average vocational

> school, which involves a lot of work but guarantees that most of our school-leavers will get a job. We launch our training according to the demands of this region... The proof is that our school is financed primarily by the firms in the food industry and still today they offer 8 to 9 million Fts a year to our school.'

The Fund for Vocational Education, especially the money that is paid directly to schools mainly to update the equipment at the workshops, is a great opportunity, according to the headmasters of the vocational training schools. Its size depends on the cleverness and the relationships of the school leader.

The less innovative vocational training schools, such as the No. 109 Vocational Training School in Debrecen, take advantage of their huge buildings and other institutions that are the heritage of the previous regime.

> 'We let our classrooms, our computer room was rented by 15 enterprises for a course. We have a lot of establishments, our institute is located on a large territory and we have nice sports grounds as well.'

The financing of workshops is difficult and puts a burden on schools and self-governments. But financing individual training burdens the masters, the craftsmen. So, in addition to the question of how to distribute the money from the State's budget and the self-governments devoted to training, the question of how to stimulate craftsmen to take part in training is also arising. As mentioned earlier in this paper, the opinions about it vary. Some people think that they are not sufficiently encouraged to take part in training, while others think they benefit from the apprentice's work. In addition, there is the well-known (but unprovable) phenomenon that craftsmen in the fashionable trades charge money to train apprentices. Since there are fewer places for learning practice than apprentices, parents are at the mercy of the craftsmen, and they pay them. Neither party wants to reveal this transaction openly. According to the representative of the IPOSZ in Debrecen:

> 'It is a two-edged thing. It is true that many funny articles are published about the fact that the entrepreneurs in the private sector provide a place for practical training for money. Even I cannot afford to pay so much that my daughter would be trained by a master. But, on the other hand, one must consider that they can discount 1,500 Fts from their taxable income, and must pay 450 Fts for social insurance, the scholarship, working clothes, etc. It is true that a third-year apprentice is productive, so the entrepreneur may recover the cost of training. But the apprentices may waste the materials or ruin the tools and equipment, and it is time-consuming to deal with them.

It is not only the question of money which discourages craftsmen from training apprentices. The representative from IPOSZ said that entrepreneurs often said that they did not want any competition, they were glad to have any job at all. The requirements of the new Act (prescription of pedagogical qualification for masters) also lessen their 'enthusiasm' to take part in training.

She was very discontented with the fact that private entrepreneurs cannot apply for money from the Fund (since only training enterprises have legal status):

> 'It discriminates against the private entrepreneurs, and I cannot see the point of it... The leader of one vocational school training bricklayers admitted that craftsmen deal with the apprentices well, so she took them into the vocational training school and pays them a salary for their second job.'

One can feel the conflict between the private entrepreneurs and the limited liability companies specialized in training. As she said:

> 'One of the biggest problems is the mushrooming of the training enterprises. There is a lot of money for training and they take it or shift it to schools.'

The leader of the Training Ltd. in Csepel agrees that the position of the training enterprises is not clear. They can benefit from the law, which favours them, and this irritates the craftsmen. According to him, a compromise could be reached if the training enterprise was changed into an inter-enterprise workshop maintained by the Chamber, as in Germany.

> 'The Training Ltd. can undersell because it gets the value of its expenses back. Of course, people say the business of training is less expensive for them. All right, let the Chambers and the entrepreneurs and craftsmen pay the costs, and then we shall stay in the workshop. We won't produce products, we shall only train according to a strict plan. The bricklayers will be expected to stay there for six weeks, apprentices will be given ten bricks a day, and there will be a precise budget.'

Considering the conflict between the craftsmen and the training enterprises he took the other side and said:

> 'I have only enough money to keep me going, we do not make a profit. I do not have money to buy new equipment... Craftsmen ask for a lot of money from the parents. A bricklayer asks for 20 to 30,000 Fts, a hairdresser or cosmetician asks for 50 to 100,000 Fts, and after training, they won't employ the apprentices. A private entrepreneur doesn't give scholarships, work clothes or tools to the apprentices - we do.'

We can see that the challenges that vocational education in the two regions must face and the answers given by them to this crisis are very similar. But there are differences as well. The self-governments and vocational schools work well together. They co-operate, they depend on each other. In Debrecen, to save its schools, the self-government established the 'municipal workshop basis'. In Budapest, this would have been impossible because of its size. However, the establishment of the Centre for Intervening shows that the self-government could find a solution to avoid establishing a Training Centre, instead providing its schools with an information centre which is based on the training capacities of the vocational schools in the capital.

The school sample shows that the less innovative schools were found in Debrecen. On the one hand, this means that Budapest offers better chances for schools to survive. The schools there are closer to the centre, the flow of information is quicker. But the fact that even in Debrecen one can find innovative schools that are working well shows that, besides the disadvantageous external factors, the personal, subjective factors, the style of the management of the vocational school play an important role. The schools are grouped according to the following indicators:

	Innovative vocational schools	**Less innovative vocational schools**
Enrolment	growing or stable	decreasing
Structural changes	crucial changes (not only launching secondary vocational classes), IPOSZ classes, World Bank project, change in specialization	slight changes (starting secondary vocational classes)
Attitude toward the training centres	co-operative	hostile
Practical training	well-equipped workshops, new forms of training, flourishing connections with enterprises	traditional form of training
School business	the school does business itself but by employing skilled workers and not with apprentices	no business or only school shops, or leasing the sites of the school building
Style of management	manager type of director the headmaster or somebody from the staff deals with raising money for the school, with keeping in touch with enterprises	pedagogue style of headmaster

In my opinion, despite the recession, the environment crucially determines the space of the school. But my experience tells me that very much depends on the school's management style and on the headmaster himself. Schools where the headmaster could become the manager, and was co-operative with the environment, could survive the crisis quite well. But in cases where the external factors are disadvantageous and the headmaster is unambitious and not willing to change, schools will not prosper.

CONCLUSION

Although my sample is far from representative, I feel that by putting together the problems of vocational education on the macrolevel demonstrated by macrostatistics, and the problems of the management and financing system on the macrolevel and on the microlevel, as demonstrated by the interviews, I have shown that there are many common points. The most critical issues in vocational education are the questions of school structure and the future of the traditional vocational training schools, and the problems of financing and the links between vocational education and the economy. In this paper I did not refer to other serious problems, such as the position of teachers in vocational education or the content of the curriculum, since these subjects went beyond my field of interest and would make this paper too extensive.

We saw a number of different approaches as concerns the structure of the educational system. It is quite understandable that the Ministry of Education or the self-governments are in favour of the expansion of general education, while the Ministry of Labour votes for secondary vocational education which gives both baccalaureate and qualifications, and entrepreneurs would like to see the dominance of dual training.

The other very vital issue is where to train pupils. Previously, pupils of the secondary vocational schools were trained at school workshops and apprentices of the vocational training schools were trained at firm workshops. Due to the recession, firms could not maintain their workshops. At the same time, the new Act on Vocational Education declares that training should be done in the market, but as long as the market is unwilling to do it, the State and self-governments have to help the vocational training schools and establish many school workshops. The situation today is that although almost all the actors in this field agree that training should be performed 'on-the-spot' in the economy, the number of school workshops and the dominance of the State has increased. This means that the transition period will last longer than was first anticipated. This has both advantages and disadvantages. The advantage is that vocational education has not collapsed; it was humane both for pupils and teachers. The disadvantage is that the necessary changes in vocational education are being delayed and might result in a wider gap between Hungary and the modern world.

As shown in this paper, the administration and management system of the Hungarian vocational education is quite complex. The dominant actor is the Ministry of Labour, but responsibilities are divided among several actors, such as the Ministry of Education, other ministries, self-governments and tripartite forums. This management system becomes more complicated since politicians opposing each other are (or were) sitting in the ministries and in the self-governments, which did not help co-operation between the two sides.

As anywhere, the most critical issue is the question of money. Who should finance vocational education and with what money? Entrepreneurs are complaining that the State wants to shift the responsibility for training to them without handing over any rights. The government thinks they already have many advantages and entrepreneurs want a 'free ride'. The tripartite forum should be the forum to reconcile the interests of the different actors, but due to the semi-legal position of the organizations representing social partners, the Ministry of Labour plays a dominant role. Nevertheless this forum can be the beginning of a real tripartite forum since it offers opportunities for social partners to learn their roles.

The problem is that the link between vocational education and the economy is not perfect. Since the economy is weak, the State has had to intervene by giving support to schools and to actors in the economy, but it weakens the market as well. On the one hand, it was necessary to protect the interests of the pupils, but on the other, this created conditions which resulted in the birth of a flourishing educational and training market. The problem is that the actors in this market do not have equal rights. Training enterprises - the limited corporations offering training - are in a more advantageous position than, for example, the craftsmen or the other actors of the market. Some of them exploit this situation as well as the lack of information and control, and manage to get much money from the State budget even if they offer inadequate training.

The members of the tripartite forums often represent the interests of the educational institutions or the training enterprises and the interests of the economy remain hidden. Since there is no information about the skill requirements of the economy, apprentice training is specialized according to the facilities of vocational training schools, and not to the market's demands. Schools are trying to start new fashionable courses, but they reflect the demands of the parents rather than the market. There is a connection on the input side between the schools, training enterprises and the parental market. The interests of the actors are to offer any place for the students to get some kind of qualification. This is good for the parents as well as for the schools and training enterprises, whose existence depends on the number of enrolled pupils. The problem is that the schools and the market are not well connected on the output side. The feedback from the economy is slow. The information about the school-leavers, on how they managed to survive in the labour market, is poor (some good tracer studies exist, but the sample is not large enough to generalize). There is no control on the external efficiency of training institutions (except the training centre where there are trials to control its effectiveness through surveys). Craftsmen and training enterprises often train apprentices to exploit their cheap labour, but only a few of them will be employed. This might be demonstrated by the fact that there are a lot of IPOSZ classes for training motor mechanics or hairdressers, while according to the data of the Labour Centre the proportion of unemployed school-leavers in these trades is relatively high.

The feedback from the economy to vocational education seems irregular, and the existence of the special training market - which is not a real market - shows that we have the same paradox in vocational education in Hungary as we had in other fields during our history. To modernize the economy the State has to create markets, but a market created partially through the help of the State does not work in the same way as a 'real' market does. There are a lot of other features that do not fit the picture of the classical market. It is true that vocational education did not collapse due to the intervention of the State and of the self-governments, but the price to be paid is that the public sphere is running into debt. On the other hand, the wages of the pedagogues are kept low.

I think that there will be drastic changes in this respect. Some schools must be closed down, some teachers must be dismissed. This tendency is strengthened on the one hand by the fact that the number of enrollable children is decreasing and, on the other, that the new socialist-liberal Government is promising more restrictions, to put the economy in order.

However, there are a lot of experiments going on in Hungarian vocational education, which makes for a very lively picture. This picture is partly school-based and partly similar to a dual system; the market-based system is also represented - for example, by the training centres. The tendency of enrolment seems to be the expansion of general education, but vocational training schools and special training schools will not disappear, and such new forms as post-secondary education or training in the labour market will keep flourishing.

REFERENCES

András BENEDEK. "Transition - stability - advance". *Vocational Education* 1994/6).

László FEJES. "Summary of the situation of vocational education in the 1992/93 school year". *Review of Vocational Education.* 1993.

Péter FARKAS. "Changes in demography, labour market, financing, administration and educational policy influencing vocational education: signs of crisis, problems of co-ordination and suggestions" (manuscript, 1993)

Péter FARKAS. "Vocational educational policy". Education, 1994/1.

Gábor HALÁSZ. *Rationality of employers or the control of educational administration.* Research Institute for Educational Research, Budapest, 1988.

László KOLLER. "Thoughts on the future of the vocational training schools". *Review of Vocational Education.* 1994/1.

Ilona LISKÓ. *Changing schools.* Education, 1994/1.

György MÁRTONFFY. *Activities of the private sphere and of the organizations representing economic interests influencing vocational educational policy*, manuscript, 1993.

Zsófia SZÉP. "Financing of vocational education". *Vocational Education*, 1994/6.

Monthly Bulletin of Statistics, 1994/5.

Labour Market Information, National Labour Centre, 1994/4.

School leavers without jobs at the beginning of 1993. Ministry of Labour.

Statistical Yearbook of Hungary, 1993.

Vocational Education in Hungary, 1993, Ministry of Labour.

Restructuring vocational education in Poland within the context of a free market economy

by Stefania Szczurkowska

Introduction

The general objective of this report is to assess how the Polish VET (vocational education and training) system has been affected by the decentralization of its management as well as by the country's new free market economy.

More specifically, we shall analyze the distribution of power in vocational education and determine who the various actors are. We shall also discuss how vocational-education institutions operate in the changed administrative context and how they survive in the new economic conditions. To this end, we shall undertake a detailed examination of the teaching contents and organization at the school level, of the sources of funding and of the transition from school to work. Finally, we shall focus on the role and involvement of enterprises in training, underscoring positive or negative attitudes.

The methodology adopted for this study is based on a qualitative analysis of the data collected through field research targeted on the following populations: the Ministry of National Education, Superintendency Bureaux as local education authorities, school headmasters, and enterprises. All information was obtained through direct interviews. The school sample covers the Warsaw area and the region of Silesia in the south of the country. The selection criteria are explained further on (Part two).

The first part of the report is a reflection on the major policy issues faced by the Polish VET system in the changing economy. It examines the general context through an analysis of the most significant recent changes from the socio-economic point of view, a comparison of the former and the present structures of the VET system, and a general outline of its management, its funding and its responsiveness to labour-market requirements.

The second part focuses on schools, providing an analysis of managerial responsibilities, funding problems, and the adapting of skills to labour-market demands, as seen from their perspective. The managerial responsibilities will be discussed in terms of the freedom of action they involve, as well as the limitations inherent to them. The learning process will be examined on the basis of the new curricula and their ability to meet the changing labour-market needs. Special attention will be brought to practical training, which gives evidence of a variety of problems related to school workshops, including a shortage of financial resources. We shall also explore fund-raising initiatives conducted by schools locally.

The third part of the study is centred on examples of joint school-and-enterprise initiatives with an emphasis on the latter's involvement in training. The analysis will give a clear picture of the scale of their commitment and the positive or negative nature of their attitudes. This part of the research aims to determine whether there are mechanisms for seeking partners and taking initiatives, whether training is organized in such a way as to respond to labour-market needs, whether any forms of financial support for schools can be said to exist, and, finally, whether some kind of long-term training perspective and a future-recruitment policy can be detected.

The second and third parts of the report will not be restricted to a parallel description of the attitudes expressed by schools on the one hand, and enterprises on the other. For a more convincing demonstration, we have attempted, wherever possible throughout the two sections, to confront the opinions expressed by both of these actors of the VET system.

The conclusions, apart from summarizing the most important results of the study, will try to show in what respects action could be improved on the basis of this research. The final remarks should establish whether it is possible to identify the priority measures that need to be adopted in the field of the Polish vocational education system. They should also determine to what extent the information presented here is relevant to the reorientation of the VET scheme and can be taken into consideration by decision makers.

In order to clarify how data was gathered for the research, appendices to the report provide the full questionnaires used for the interviews with the Ministry of National Education, the Superintendency Bureaux as local education authorities, the school headmasters and the enterprises. Appendices comprise tables as well.

The references indicate both data sources used directly and other publications consulted in the course of the study. We should mention that the following professional Polish-language periodicals were also reviewed: *Edukacja* (Education), *Nowa szkola* (New school), *Edukacja i dialog* (Education and dialogue), and *Rynek pracy* (Labour market).

Part I

Trends and policy issues: the national perspective

The idea of this chapter is to describe the most important issues faced by the Polish vocational education from the new national perspective of a free market economy. The characteristics of the VET system are preceded by a brief presentation of the country's socio-economic context in the early 1990s. The main features of the inadequacy of vocational education with regards to the labour market are followed by some suggested areas of changes. Further on, we deal with some aspects of management and funding, as well as with the problems arising from responsibility-sharing schemes. The topic of meeting labour-market demands is accompanied by an analysis of the recent changes in the VET system and of the initiatives that are underway. Attention is brought to two entirely new types of schools: an experimental vocational school, and projected technical lyceums. Some remarks concerning the emerging sector of non-public vocational schools close the chapter.

1. A difficult socio-economic context

The socio-economic situation of Poland in the early 1990s challenged the VET system and forced it to start reacting. In 1990, GDP dropped by 11.5 per cent, it diminished slightly less in 1991, and in 1992, in spite of having grown by 1 per cent from the preceding year, it was 17 per cent below the 1989 level. Industrial output diminished in the same period by 30.4 per cent, which brought it down to the 1974 level. In 1992, it decreased by 4.2 per cent from 1991. Profitability in the enterprises, plummeted from its 1990 the level of 29.9 per cent, to 4.8 per cent in 1991 and to 3.1 per cent in 1992. The extremely difficult financial conditions businesses had to face had a significantly negative influence on public finance. No further back than in 1990, state budget revenues exceeded expenditure, but in 1991 and 1992 the deficit reached approximately 31,000 billion zlotys and 69,000 billion zlotys, 3.8 per cent and 6 per cent of the GDP, respectively, in current prices. The state budget expenditure on education (excluding university level) amounted to 11.6 per cent in 1991 and went down to 10.2 per cent in 1993 (see *Tables 1, 2* and *3* for general data, gross domestic product and state budget).

The year 1990 revealed the previously unknown problem of unemployment. At the end of 1990 and 1991, the unemployment rates were 6.1 per cent and 11.4 per cent respectively. In the middle of 1992, unemployment went up to 13.6 per cent and at the end of 1993, 15.7 per cent of the active population were deprived of jobs (2.89 million people).

Tables 4 and *5* show unemployment data on the national scale and from the perspective of the Katowice and Warsaw voivodships, both of which were subjects of the field studies for this report. The numbers give evidence of a general tendency in the unemployment among school graduates – the higher the level of education, the lower the unemployment rates. University graduates are in a privileged position, while basic vocational school leavers are the ones who are most affected by unemployment. Data in *Table 6* confirms the above-mentioned trend in the Katowice administrative unit, or voivodship.

Table 1. General data

Territory	**322,577 km^2**	
Population	**38,505,000**	
Population per km^2	**123**	
Urban population	**23,808,000**	**61.8%**
Rural population	**14,697,000**	**38.2%**

Mały Rocznik Statystyczny 1994,
Główny Urząd Statystyczny,
Warszawa 1994, p. 19, 44.

Table 2. Gross domestic product (fixed prices 1990)

YEAR	Global in billion zlotys	Dynamics in % Preceding year = 100%	Share in %		
			Industry	Building	Agriculture
1990	574,180.1	88.5	43.6	95	7.3
1991	530,582.5	92.4	39.2	10.9	8.4
1992	538,609.1	101.5	39.6	11.2	7.3

Mały Rocznik Statystyczny 1994,
Główny Urząd Statystyczny, Warszawa 1994, p. 304

Table 3. State budget (in billion zlotys)

YEAR	Global Revenue	Global Expenditure	Global Expenditure on education	%
1991	210,885.1	241,857.7	28,128.4	11.6
1992	312,775.4	381,890.2	39,695.4	10.3
1993	459,005.7	502,430.8	51,747.6	10.2

Mały Rocznik Statystyczny 1994,
Główny Urząd Statystyczny,
Warszawa 1994, p. 287, 289

Table 4. Unemployment among graduates

YEAR	Unemployed		%
	Global	Graduates	
1990	1,126,100	164,300	14.6
1991	2.155,600	222,400	10.3
1992	2,509,342	185,300	7.3
1993	2,889,600	205,000	7.1

Mały Rocznik Statystyczny 1994,
Główny Urząd Statystyczny, Warszawa 1994, p. 304

Table 5. Unemployment (31 December 1993)

	Global Registered unemployed	%	School graduates					
			Global	%	Universities	General Secondary Schools	Secondary and post-secondary vocational schools	Basic vocational schools
1	2	3	4	5	6	7	8	9
Poland	2,889,601	15.7	204,995	7.1	7,809	32,174	74,166	90,846
Katowice voivodship	172,009	9.7	14,529	8.4	501	2,445	6,634	4,949
Warsaw voivodship	81,594	7.7	5,101	6.2	266	1,088	1,870	1,877

Bezrobocie w województwie w 1993 roku a inicjatywy lokalne przeciwdziałające jego skutkom,
Urząd Wojewódzki w Katowicach,
Katowice 1994, p.27

Table 6. Unemployment in the Katowice Voivodship

	1991	1992	1993
Global	116,313	148,293	172,009
Graduates	11,600	10,200	14,500
Universities	600	600	500
Secondary vocational schools	4,700	5,200	6,600
General secondary schools	1,000	1,700	2,500
Basic vocational schools	5,300	2,700	4,900

Bezrobocie w województwie katowickim a inicjatywy lokalne przeciwdziałające jego skutkom,
Urząd Wojewódzki w Katowicach,
Katowice 1994, p. 31, 43, 44

In 1992, the level of real wages was 26.6 per cent lower than in 1989. In 1990, the decline was one of more than 24 per cent. As for the inflation rate in consumer goods prices, in 1990, it amounted to 585.8 per cent, and in 1991 and 1992 it was 70.3 per cent and 43 per cent respectively.

Reduced direct state involvement in the country's economic activities has been reflected in the privatization of state enterprises. Between August 1990 and December 1992 privatization affected 2,387 state enterprises. The process, however, has not been fully supported by society, which has demonstrated a lack of faith in the belief that privatization could be a remedy for the country's economic problems. The fear of losing one's job, therefore of growing unemployment, has also become symptomatic of the social malaise. Furthermore, a generally difficult economic situation may be understood as a lack of positive effects as a result of privatization. In addition, certain social actors claim that privatization is wrong because of suspected unfair advantages gained by some over others.

This general socio-economic background seems to indicate that social policy should include among its priorities the fight against unemployment by supporting vocational training and retraining, and by visibly improving the way the education system operates.

2. The VET (vocational training and education) system

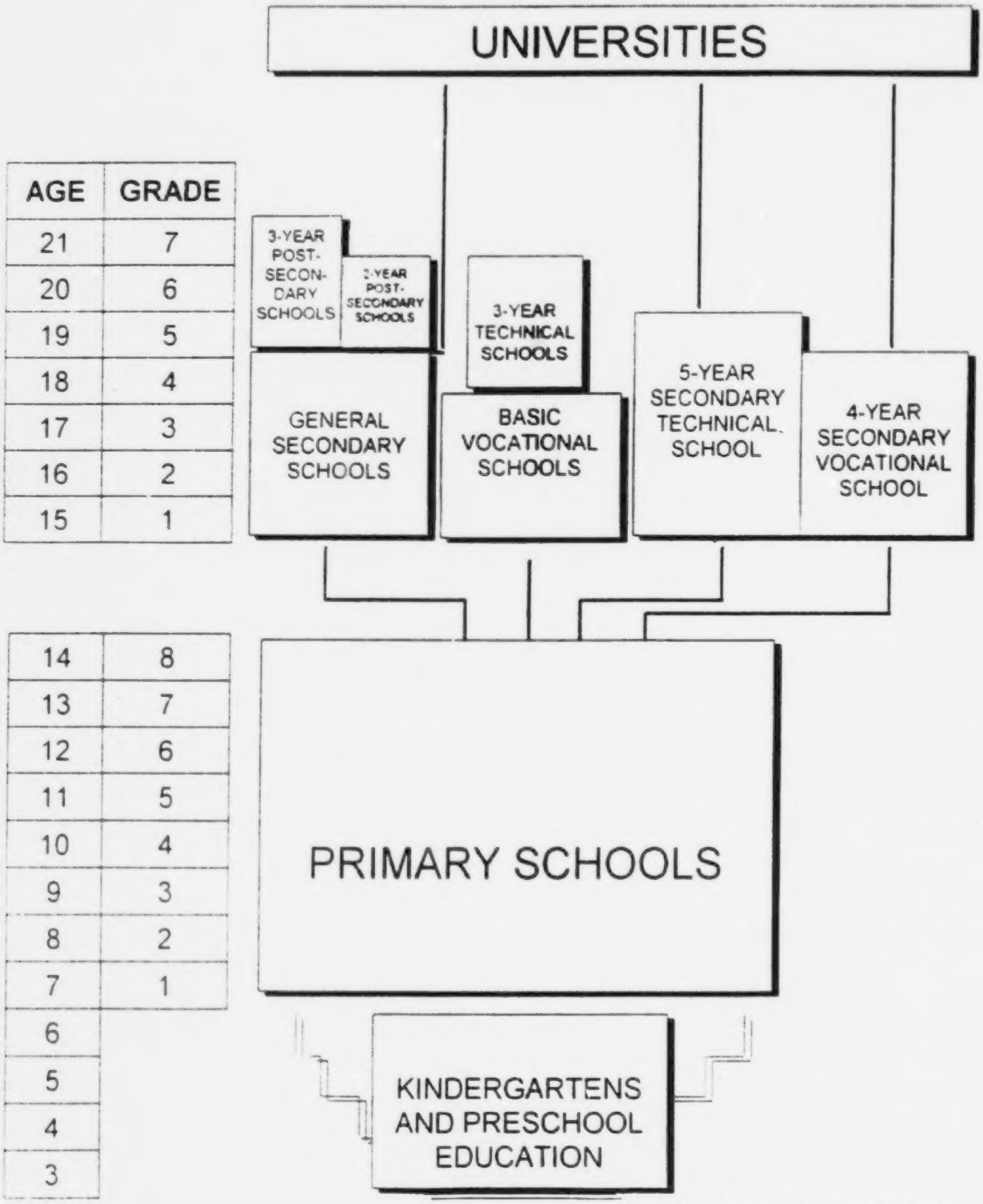
2.1 Structure

The vocational-education system in Poland is essentially school-based and is placed under the main authority of the Ministry of National Education. The structure of the system was remarkably stable for more than 25 years, despite a number of reforms that were implemented. The most important components of the vocational education scheme after eight years of primary school are: three-grade basic vocational schools, four-grade secondary vocational schools, five-grade secondary technical schools and post-secondary schools of different durations, but with preference given to a two-grade cycle of study. The structure of the VET system, as well as the teaching contents and the curricula were shaped to serve the economy, which was monopolistic and centralized. This system, which is still in effect, and the projected scheme for the education system in Poland are presented in *Figures 1* and *2*. In terms of structure, the most important innovation is a new type of school, a four-grade technical lyceum, described further on in this part of the report. The number of years of study in other types of schools in the project remain the same.

In the early 1990s, over 70 per cent of eight-grade primary school leavers continued their education in secondary vocational-level institutions. Among these, the predominant role in the VET system is played by basic vocational schools, which absorb nearly 50 per cent of all primary school leavers. Basic vocational schools train qualified workers for narrow sectors of the economy, and have no secondary-school leaving examinations.

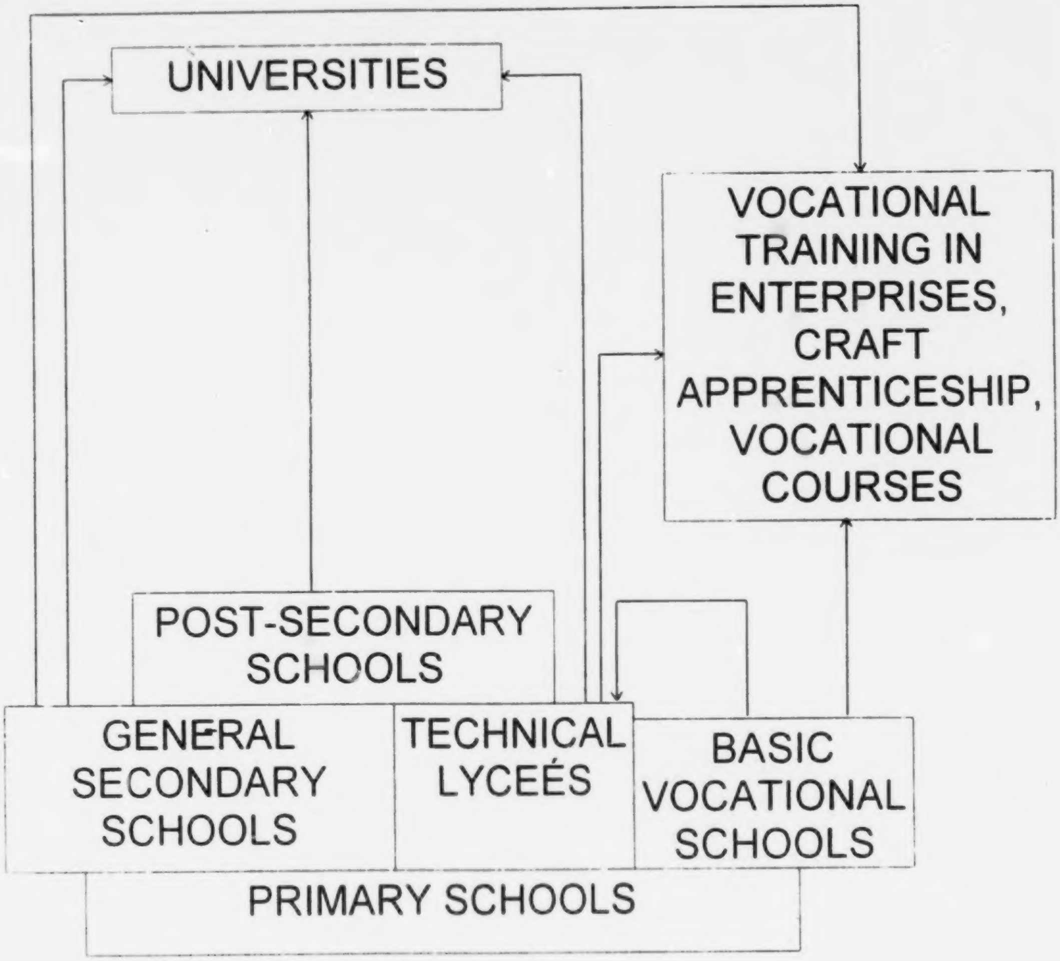
The four-grade secondary vocational school has a similar status. It offers a diploma corresponding to the certificate of a qualified worker guaranteed by basic vocational schools. The difference is the possibility of passing the secondary-school leaving examination after completing education in the four-grade vocational school.

Figure 1. Education system in Poland


UNIVERSITIES
AGE
GRADE
21 7
20 6
19 5
18 4
17 3
16 2
15 1
3-YEAR POST-SECONDARY SCHOOLS
2-YEAR POST-SECONDARY SCHOOLS
3-YEAR TECHNICAL SCHOOLS
GENERAL SECONDARY SCHOOLS
BASIC VOCATIONAL SCHOOLS
5-YEAR SECONDARY TECHNICAL SCHOOL
4-YEAR SECONDARY VOCATIONAL SCHOOL
14 8
13 7
12 6
11 5
10 4
9 3
8 2
7 1
6
5
4
3
PRIMARY SCHOOLS
KINDERGARTENS AND PRESCHOOL EDUCATION

Source: Ministry of National Education

Figure 2. Education system in Poland


UNIVERSITIES
VOCATIONAL TRAINING IN ENTERPRISES, CRAFT APPRENTICESHIP, VOCATIONAL COURSES
POST-SECONDARY SCHOOLS
GENERAL SECONDARY SCHOOLS
TECHNICAL LYCEÉS
BASIC VOCATIONAL SCHOOLS
PRIMARY SCHOOLS

Source:
Ministry of National Education

To become a technician, pupils may choose one of the following schools:

(a) a five-grade technical school based on the eight-grade primary school;
(b) a three-grade technical school based on a three-grade basic vocational school;
(c) a two- or three-grade post-secondary vocational school based on a four-grade general secondary school.

2.2 *Weak points of vocational education and recommended changes*

The training institutions comprising the Polish VET system inherited from the past years have turned out to be inefficient and inadequate for the economy in transition. A particular concern expressed by every level of educational authority refers to three-grade post-primary basic vocational schools, the only ones that do not require entrance examinations. They offer vocational instruction and a very limited knowledge of general subjects. Basic vocational schools have an extremely mono-industrial character. This makes switching from one type of vocation to another very difficult. This type of school is traditionally considered as a place for those who failed to enter into other kinds of training institutions.

The most visible symptoms of the backwardness of the present Polish VET system affecting every type of school listed in point 2.1 can be described as follows:

(a) A large number of narrow occupation fields (originally 500 specializations), which means that vocational-school graduates have very limited possibilities of finding a job that corresponds to the particular profession for which they were trained. To make things worse, current legislation gives a single vocational description of the graduate, in which his/her level of preparation to a given job is determined in a very traditional way. This long-standing practice treats knowledge statically and applies it to so-called typical situations that do not necessarily correspond to the reality of both technological and economic changes.

(b) A very low level of general education, which means that vocational-school graduates are incapable of absorbing knowledge and acquiring skills in other streams than those studied in school. It is enough to point out that History used to be excluded as a subject from the curricula of secondary vocational schools, which obviously contributed to the gap in general knowledge among vocational-school pupils.

(c) Having to make very early decisions as to a future vocation. Such a choice is made at the age of 14-15 and, being premature, it often leads to personal failure.

There are many more disadvantages, a lot of which are produced by the insufficient funds allocated to education. Scarce financial resources have resulted in obsolete school equipment, teaching contents and curricula, and in a persistent rigidity in the organizational structures.

The demands of a free market economy constitute crucial challenges to restructure the VET system and its institutions. Reforms must aim at:

(a) An intensification and a broader range of general education in all types of vocational schools.

(b) The cancellation of narrow vocational streams and specializations and the adoption of wide fields of study.

(c) A change in the teaching contents and methods to develop attitudes favourable to vocational activity and mobility. The ability to switch frequently and rapidly from one vocation to another, from one set of skills to a new one, constitutes a desirable goal.

(d) The establishment of conditions conducive to rational decision making in the choice of a future vocation. A new information system and efficient vocational guidance are required.

3. Organizational aspects of the VET system

3.1 How schools are managed and who is in charge

Before presenting the initiatives taken for the improvement of the VET system, it is necessary to determine the distribution of managerial power and the sharing of responsibilities (see *Figure 3*). The Ministry of National Education did not lose its nearly exclusive decision-making privileges until a new Law on the Education System, was promulgated on 7 September 1991. Until that time, the Ministry had entire control over the VET system as a monopolistic decision-maker and disposer. At present, a broader range of competence has been delegated to the local education authorities constituted by Superintendency Bureaux, and to some extent to the school headmasters.

The Inspectorates of Education, which operated within the framework of local governments throughout the country, were cancelled in the 1990/1991 school year. They had previously constituted an intermediate level of the local education administration. At the same time, educational administration was separated from general administration and thereby obtained autonomy.

These transformations became possible as a result of the provisions of two legislative acts put into effect by the Polish Parliament: the above-mentioned Law on the Education System and Law on Local Self-Government. According to these, the managerial power is distributed among:

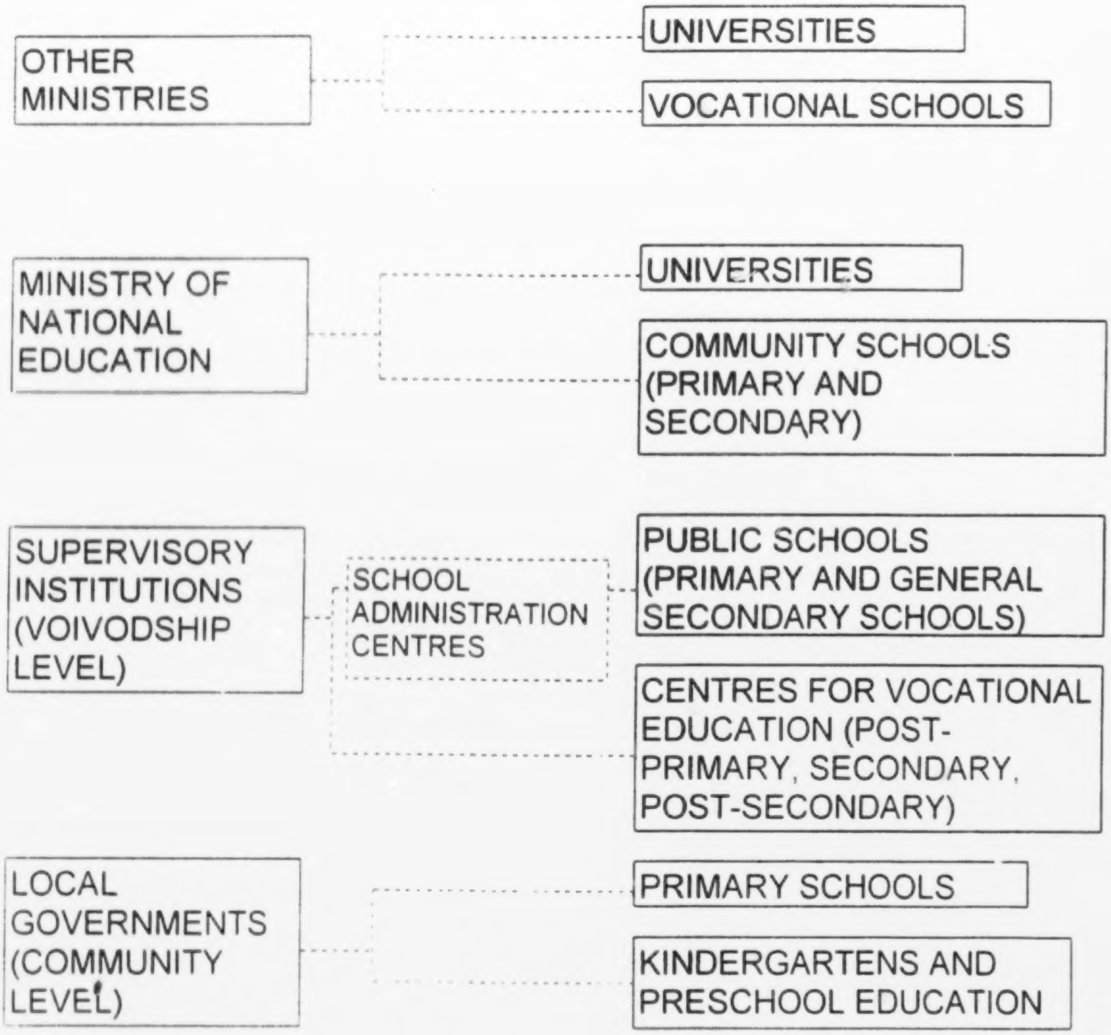
(a) The Ministry of National Education, which coordinates and implements the state education-prerogative policy, supervises the activities of local Superintendency Bureaux and collaborates with other bodies involved in vocational education and training. These include mainly other ministries – the Ministry of Agriculture and Food Economy, the Ministry of Health and Social

Welfare, and the Ministry of Culture and Art, for instance – which are responsible for nearly 20 per cent of vocational schools.

(b) Local Superintendency Bureaux, which control the implementation of the official state policy on education. They are placed in all 49 voivodships.

(c) School headmasters, who are in charge of operating schools in the field of didactics and education, supervise teachers and the teaching process, manage financial resources and control the employment policy.

Figure 3. **Administration and management of the Education System**


OTHER MINISTRIES
UNIVERSITIES
VOCATIONAL SCHOOLS
MINISTRY OF NATIONAL EDUCATION
UNIVERSITIES
COMMUNITY SCHOOLS (PRIMARY AND SECONDARY)
SUPERVISORY INSTITUTIONS (VOIVODSHIP LEVEL)
SCHOOL ADMINISTRATION CENTRES
PUBLIC SCHOOLS (PRIMARY AND GENERAL SECONDARY SCHOOLS)
CENTRES FOR VOCATIONAL EDUCATION (POST-PRIMARY, SECONDARY, POST-SECONDARY)
LOCAL GOVERNMENTS (COMMUNITY LEVEL)
PRIMARY SCHOOLS
KINDERGARTENS AND PRESCHOOL EDUCATION

Source:
Ministry of National Education

Mention must be made here of a meaningful decree addressed to superintendents and school headmasters issued by the Ministry of Labour and Social Policy in 1991. The Ministry, by virtue of this document, encourages local education authorities and headmasters to watch the labour market carefully, to analyze its demands and then create a suitable school structure in a given region of the country. It is, however, difficult to put this postulate into practice, because of insufficient links with Labour Offices – newly established institutions that are supposed to provide information about training demands. This kind of partnership is currently being developed, but has not reached a stage for the decree to have had a noticeable impact upon the vocational-education system.

The Minister of National Education is authorized to cancel decisions made by superintendents if these are in disagreement with the legal regulations in force. The Minister may also determine the conditions for pupils' enrolment or may change one type of school to another. The central educational authority defines a general scope for the programmes of study and the minimum curricula for every compulsory subject. The Minister is responsible for textbooks and other recommended school aids. He has a say on the evaluation of pupils' science achievement, promotion and examinations. The Minister's decisions regulate the introduction of innovations to the teaching process and the running of experimental schools. In all of these activities, the Minister of National Education collaborates with other ministries responsible for given branches of vocational education and training, as well as in the determination of vocational streams and specializations.

Superintendents are elected through competition in all 49 voivodships. The principles of the competitive procedure are established, however, by the Minister of National Education. Even if the Minister asks local government authorities for opinions on the candidates, it is he who gives final approval. Superintendents can be elected from among school or university teachers who have at least seven working years in the profession.

Superintendents can formulate legal acts in the form of official directives to be followed by the schools. They run and control schools in a given area. They also authorize the opening of new schools, both public and independent of the state. Superintendents' supervisory activities include: evaluation of the didactic process and the school curricula (to determine whether they are properly implemented and followed); assistance to schools and teachers in their work; encouraging teachers to innovate in pedagogical, methodological and organizational areas.

School headmasters are also appointed through a competitive procedure, in which final decisions are taken by the superintendents, who run the majority of vocational schools in Poland. Headmasters must have worked for at least five years as school or university teachers before they can apply for managing schools.

School headmasters' responsibilities refer above all to the teaching process. They supervise not only teachers dealing with particular subjects, but also the staff members appointed to practical training (so-called instructors). Headmasters make decisions on the employment policy for teachers, the administrative staff and the rest of the school employees. They can also dismiss any member of the staff. Headmasters have at their disposal financial resources transferred from Superintendency Bureaux and are directly responsible for their proper distribution. Due to insufficient budgetary funds, headmasters also undertake their own fund-raising initiatives. Renting premises is one of the most common activities school headmasters are authorized to conduct (see *Part II, point 5*).

3.2 *How vocational schools are funded*

The Ministry of National Education receives the budgetary funds for education via Parliamentary decisions. Other ministries responsible for VET institutions, such as the Ministry of Agriculture and Food Economy, the Ministry of Health and Social Welfare, the Ministry of Culture and Art, are also given financial resources from the state budget. The internal distribution of funds then takes place.

The entire public vocational-schools sector continues to be financed from the state budget (Section 79 – Education). Specific regulations for non-public VET institutions are presented in point 1.4.4 of this part of the report. Significantly, the major role in the distribution of the budgetary funds is played by the respective Ministries, followed by Superintendency Bureaux, with schools in the last position. The money is distributed by the minister to the superintendents who, according to local needs, decide how the resources at their disposal are to be allocated.

There is, however, a serious budget deficit. Usually the budget, which is determined by the Ministry of National Education and transferred to schools through local Superintendency Bureaux, covers little more than the teachers' salaries. The research shows that if schools had not taken internal, individual initiatives to raise money, they would probably have had to close down. This enormous problem affects nearly every component of school life. Headmasters are forced to turn into managers constantly involved in fund-raising.

These difficulties are illustrated by the education budget in the Katowice voivodship.

According to the local Superintendency Bureau, the resources allocated to education (all types of schools included) rose between 1991 and 1993, but only in numbers. They increased from 2,030.3 billion zlotys in 1991 to 2,890.0 billion zlotys in 1992 and 3,111.9 billion zlotys in 1993. Therefore, the 1992 budget was 42.2 per cent higher than in 1991 and the 1993 budget was 7.7 per cent higher than in 1992. Nevertheless, the official statistics show that the inflation rate in 1991 reached 70.3 per cent and in 1992 it amounted to 43 per cent.

Thus, the Katowice Superintendency Bureau needed 672 billion more zlotys to cover expenses in schools and other educational institutions, that is, the equivalent of 20 per cent of the total available budget. As a result, the education deficit is increasing systematically and it is difficult to say how and when it will be covered.

The Katowice Superintendent points out that this very dangerous feature of present expenses – an ever-increasing share of the budgetary funds' being consumed by teachers' salaries – is a continuous process: in 1992, they absorbed 83 per cent of the budget, and in 1993 they reached 87 per cent. As a result, the little money that is left over covers exclusively, but not entirely, compulsory expenses (electricity, heating, water, etc.). Necessary repairs in the school buildings are never attended to, not to mention other important investments (computers or other modern school aids).

3.3 Theory and practice in responsibility sharing

The picture of vocational schools as seen from the perspective of management and funding would be incomplete if we did not mention the educational institutions taken over by local self-governments. This trend emerged in the 1990s and it varies in scale, depending on the region of the country. It applies mainly to the primary level of education and definitely less to secondary vocational schools. Local self-governments are not eager to take broad responsibility for vocational schools, which are more difficult to manage. They are primarily discouraged by problems having to do with the equipment for the school workshops and with the organization of practical training. For Warsaw, the statistics are as follows: the city Superintendency Bureau supervises a total of 1084 schools, covering the public education sector. Out of these, 380 are vocational schools. In 1993, 29 local self-governments were running 280 schools taken over from the superintendent, but 274 of those were primary education institutions. Even though the local self-governments receive budgetary funds from the Ministry of National Education for basic expenses with the local Superintendency Bureau acting as supervisor, they don't want to invest in vocational schools because this would reduce funds for other purposes that they consider more urgent on the community level.

After a short period of time, local self-governments sometimes decide to close a school. They usually do this for lack of funding, particularly when the students come to the school from other areas to learn a vocation that is practised in their particular voivodship. In such cases, local self-governments are not willing to cover the costs of educating outside students. The Ministry of National Education must then judge whether there is a contradiction between the self-government's independence of action and the superintendent's role as supervisor.

Vocational-school headmasters are usually opposed to the idea of local self-governments running schools. They argue that the responsibility for the VET institutions should be exclusively with local Superintendency Bureaux. They feel that self-governments, being involved in many other activities of the social and economic life of a given area, would treat schools as an unwanted burden and the last of their concerns.

Restructuring the VET system raises a considerable number of problems. Responsibility sharing, and the autonomy given to local education authorities (the superintendents) and to schools is a positive development. One may get the impression, however, that decentralization remains more illusory than real. The local partners, who have a say in school management, are more part of a vertical structure than of a widely spread scheme of horizontally shared responsibilities. Even when responsibilities are delegated to superintendents or school headmasters, the final 'yes' or 'no' is pronounced by the Ministry of National Education. Discussions on this matter reveal a number of diverging opinions.

According to the official statements, schools are now given a better chance to improve their operation and increase the efficiency of the teaching process. Being more independent than in the past, they can make a better assessment of the educational needs as perceived from the local perspective. A knowledge of labour-market demands for the skills required in a particular area should also make locally taken decisions more appropriate than central directives. The partners involved in the schooling process, however, do not seem to agree with these premises. The Ministry of National Education maintains that there still persists a strong conviction in society that education should remain exclusively in the hands of the central authority, which should provide organization, funding, equipment, modern curricula and qualified teachers. Superintendents sometimes express the opinion that a lot of power has in fact been given to the school headmasters. Meanwhile, the latter often declare that, theoretically, they are allowed to take free initiatives, but that in practice, their freedom is controlled, and thus restricted.

In the face of these discrepancies, it may be useful to observe that the future shape of the country's economy is highly problematic for lack of a precisely determined development strategy. Consequently, short-term measures prevail while a long-term perspective is difficult to bring into focus.

4. Recent developments

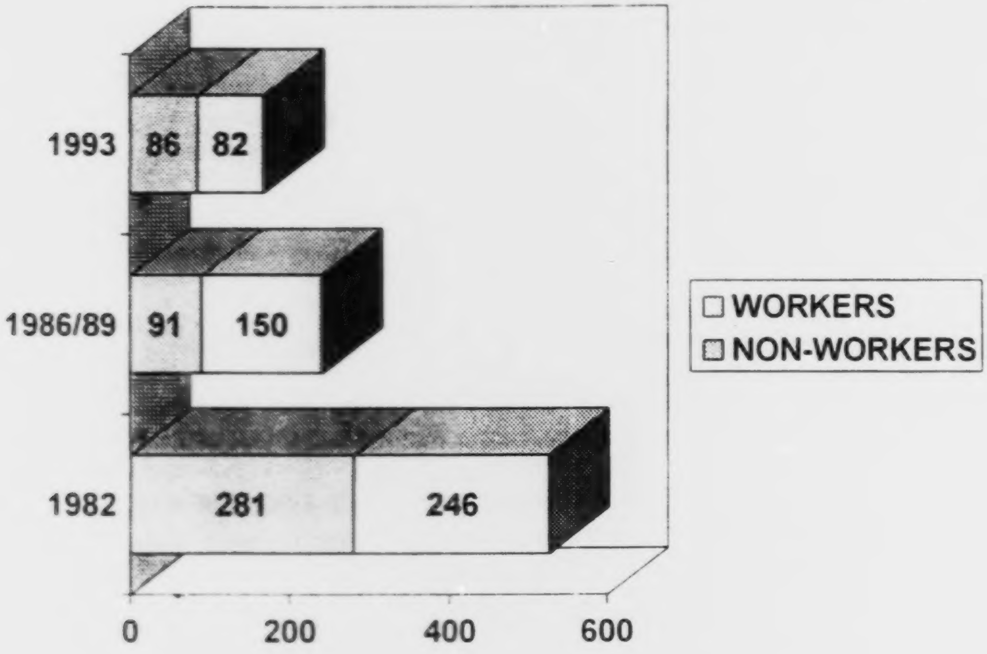
4.1 New general directions

Attempts at restructuring the VET system can be observed at the level of the central authority and can be defined as non-strategic policy measures. In other words, the Ministry of National Education advocates separate innovative initiatives and not the implementation of an integrated model. This is probably the result of an undefined vision of the national economy, the priorities of which still remain uncertain. The Ministry explains that this is a deliberate approach. The present stage of the economic changes does not make it possible to develop a totally new reform strategy for every element of the VET system. Measures must be taken step by step, so that they can be corrected on the way.

The VET Department of the Ministry of National Education has already begun to reduce the number of narrow occupation fields and to introduce non-specialized vocational streams. The final objective is to limit the total number of vocations to approximately 130. *Figure 4* gives a comparative data picture revealing a marked diminishing trend in this regard. The process consists in eliminating traditional vocational streams, no longer necessary on the labour market, and establishing new ones responding to the demands of the economy. Particular emphasis is put on a better and more profound general education in vocational schools. In the 1994/1995 school year, pupils' enrolment in three-grade basic vocational schools should be reduced to 30 per cent of total post-primary enrolment and in the long run to 10 per cent.

On the national level, the most significant changes in vocational education were accomplished in 1990-1992. In the 1991/1992 school year the total number of pupils continuing education in basic vocational schools diminished to 40.5 per cent, compared to the 1970/1971 school year when it amounted to 49.8 per cent. Reducing the number of basic vocational schools and their pupils is taking place in accordance with the policy of the Ministry of National Education and it also comes as a result of the collapse of state-owned enterprises that used to run these schools. At the same time the number of pupils choosing full-time four-grade secondary vocational schools or five-grade secondary technical schools has increased in numbers.

Figure 4. Number of vocations and specializations



Kształcenie zawodowe w warunkach
gospodarki rynkowej,
Instytut Badan Edukacyjnych,
Warszawa 1994, p. 116

The predominant position of VET institutions in the entire education system was confirmed in 1992/1993, when approximately 70 per cent of primary school leavers continued their education in different types of vocational schools: 37 per cent attended basic vocational schools, 33 per cent remained in secondary vocational schools and 27 per cent chose general secondary schools. Only 3 per cent were content with the eight grades of primary school and did not enter into any type of secondary school level institutions (see *Table 7*).

There were also changes in the distribution by fields of study. The majority of vocational-school graduates in 1990-1992, approximately 60 per cent, completed their education in industrial subjects. The second most important group, approximately 20 per cent, covered subjects in the field of commerce and management, while agriculture and forestry were studied by nearly 10 per cent. The data shows that the percentage of students who chose branches of study in the field of commerce and management has been increasing since the 1990/1991 school year, while interest in health occupations and education has been diminishing (see *Figures 5, 6* and *7*).

The statistical data illustrates that unemployed graduates were overwhelmingly trained in industrial subjects, which demonstrates an alarming inadequacy of their skills with regard to the labour market. *Table 4* offers a global image of the unemployment among graduates in Poland between 1990 and 1993. More specific data covering local trends in the Warsaw and Katowice voivodships is provided in *Part II* of this report.

The adjustment of vocational training to labour-market demands is being attempted through the curricula of so-called pilot projects, which will also be examined in Part two of this report. Twenty-six new curricula were introduced in the 1993/1994 school year and another 30 are scheduled for 1994/1995. The teaching contents for the pilot projects are determined jointly by the Ministry of National Education, local Superintendency Bureaux, school headmasters and enterprise representatives. The general objective of the pilot projects consists in a wider profile of the teaching contents and a higher level of general education. The aim is to correct mistakes of the past years, i.e. the overly encyclopedic character of the acquired knowledge, the lack of correlation between the different subjects, and excessive information on the history of technology.

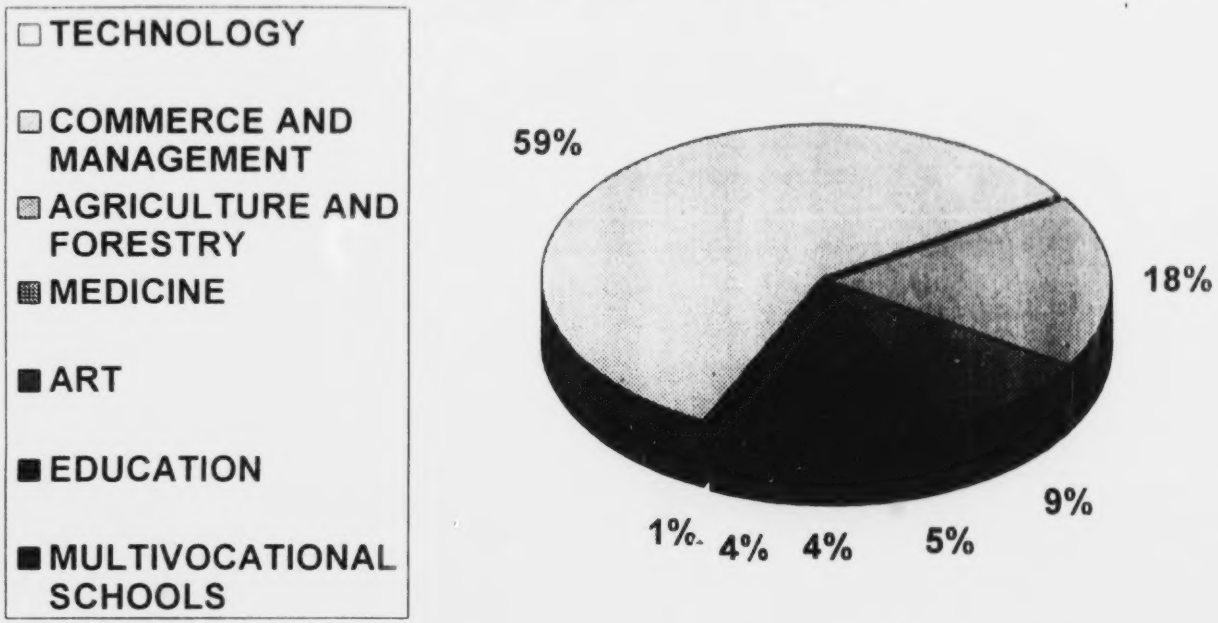
It is important, and positive, to observe that the teaching contents are shaped in accordance with labour-market needs on the basis of considerable input provided by enterprises as to their expectations regarding training. They must, however, obtain agreement for their postulates from local superintendents and apply for final approval by the Minister of National Education. After educational authorities have granted such approval, the school headmasters themselves decide whether or not they wish to introduce the changes in the curricula. If they do, they then have to implement the teaching programmes agreed upon. Most pilot curricula are found in the commercial fields of knowledge and skills such as enterprise organization, finance and accountancy, administration, and banking business.

Table 7. Graduates of primary schools continuing education

TYPE OF SCHOOL	1990/91	1992/93
3-year basic vocational schools	48%	37%
5-year secondary vocational schools	26%	33%
4-year general secondary schools	23%	27%

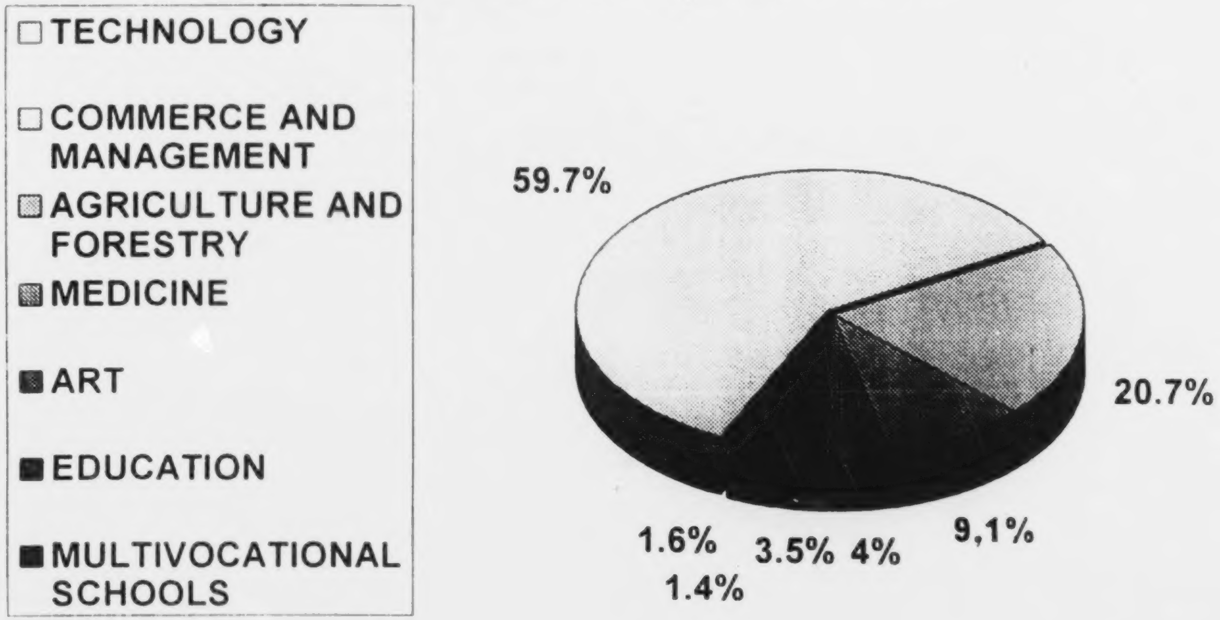
Source:
Ministry of National Education

Figure 5. Students in vocational schools by field of study in 1990/91



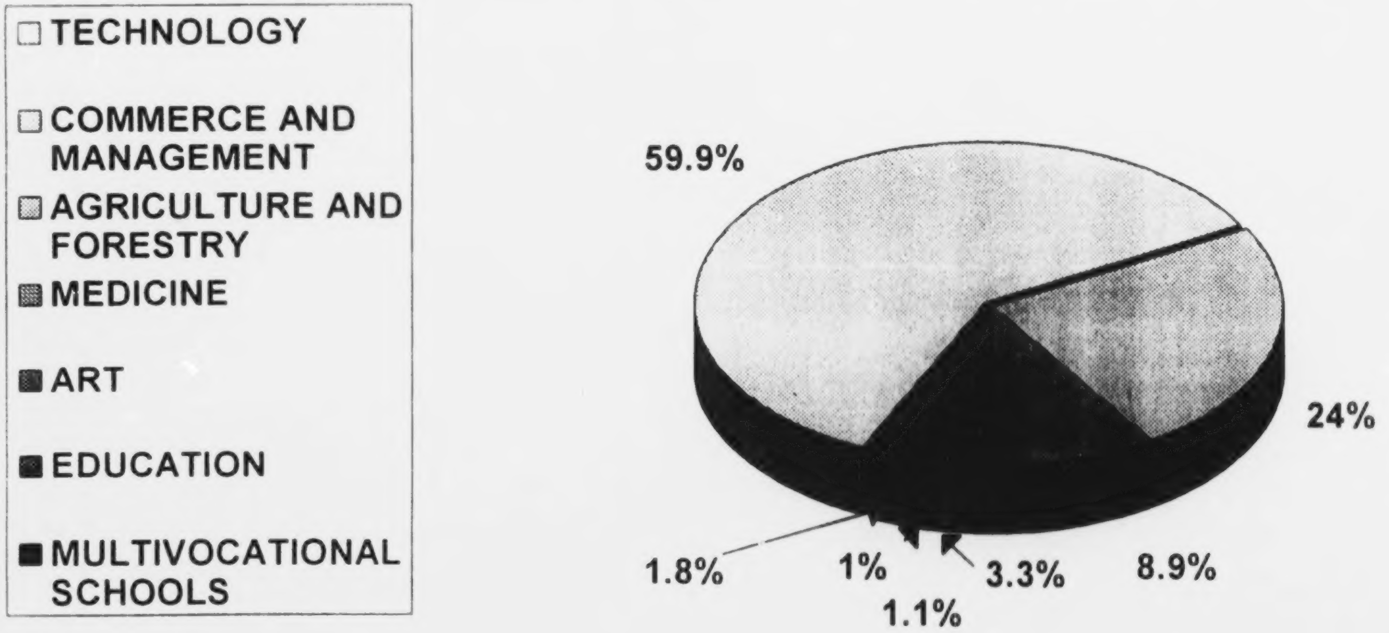
Report for the International Bureau of Education in Geneva, Ministry of National Education, Warsaw 1992. p. 16

Figure 6. Students in vocational schools by field of study in 1992/93



Rozwój oświaty w Polsce w latach 1992-1993
Raport dla Międzynarodowego Biura Oświaty w Genewie.
Warszawa 1994 (manuscript)

Figure 7. Students in vocational schools by field of study in 1993/94



Mały Rocznik Statystyczny 1994,
Główny Urząd Statystyczny,
Warszawa 1994, p. 163

4.2 An experimental vocational school

In 1992, the Warsaw Superintendency Bureau undertook, with no foreign assistance, an interesting experiment in the reshaping of the basic vocational-school model, in the form of an experimental vocational school providing education through a three-year cycle of study after the eight-grade primary school. In Grades 1 and 2, pupils acquire knowledge of both general and vocational subjects. The latter focus on general vocational knowledge and skills applicable to several types of careers. Practical training is organized in Grade 3 and takes place in firms. The school does not run workshops and does not provide practical training within its boundaries. It is a multivocational institution training mostly in services, trades and craft. General subjects are grouped in 3 blocks. The first one comprises Polish Language and History with elements of sociology, philosophy and art. The second consists of Biology, Geography, Physics and Chemistry. The third block is vocationally oriented and emphasizes computer technology, accountancy, and small-business economics. Subjects like Mathematics or Foreign Languages are taught in the traditional way.

During the first year of study, pupils are offered one hour per week of vocational guidance by representatives of different professions in the services, trade, and craft sectors invited by the school. Once a month, pupils visit firms that they choose themselves according to their particular interests.

The second year of study introduces a course in Marketing taught by the owner of a small firm and a marketing adviser. Marketing classes are complemented with lessons on the labour law and the rules of employment. The acquired level of knowledge in marketing is relatively high, and is confirmed by a separate final certificate, which is valuable on the labour market. The course has one drawback: pupils have to pay a fee for a year's study.

The experimental school emphasizes foreign-language learning. Both in the first and second grade the curriculum requires 4 hours per week of English.

An unusual aspect of the programme is a weekly five-hour cycle devoted to additional classes in the subjects in which pupils' knowledge is weak. In practice, the classes cover one entire school day, usually Friday. Polish Language, Literature and Spelling are the most frequent subjects requiring additional work.

In this school, general subjects are approached differently than in traditional basic vocational schools. The latter provide 33 hours of general subjects per week over a three-year cycle of study, while the experimental school offers 47 hours of general subjects per week in a two-year period. This constitutes an advantage for the students who plan to switch to a general secondary school after the first two years.

This experimental vocational school was designed mainly for pupils who fail to pass the competitive entrance examination to a four-grade general secondary school. The emphasis put on general subjects is intended to satisfy their expectations, and maintain the possibility of their changing from the experimental vocational school back into the general secondary school, while developing the option of a relatively quick entrance into the labour market with a good knowledge in general subjects. This solution warrants a careful comparative analysis with the traditional, inefficient basic vocational schools in terms of the graduates' job perspectives and their responsiveness to market demands. The experiment is, however, still underway, with the first graduates scheduled to leave school in 1995.

The practical training organized after the first two grades covers an entire year, or even a year and a half, depending on the type of vocation involved. Employers have expressed very positive opinions about this programme. They all point out that a long period of time devoted to practical training builds strong links with the firms and assures a good level of preparation for a future job.

In 1992 an important agreement on practical training was signed by the school, the local Superintendency Bureau and the Warsaw Craftsmen's Union. The document determined that the Craftsmen's Union would be responsible for a one-and-a-half-year practical training period and organize examinations after its completion.

The field research found the existence of only one experimental vocational school in the area of Warsaw, although the city Superintendency Bureau reports that the Ministry of National Education has already approved applications for opening other institutions of a similar nature. According to the educational authorities, if in a year's time the experiment demonstrates that the school leavers can claim a higher level of education than graduates of traditional three-grade basic vocational schools, the experiment will be conducted on a wider scale throughout the country. Experimental vocational schools may then replace the old type of educational institutions.

4.3 Technical lyceums

The Ministry of National Education has also decided to incorporate into the VET system a completely new type of school: the 'technical lyceum'. The pilot project will be put into action as of the 1995/1996 school year. This four-grade secondary vocational school intends to offer a high level of general education enabling vocational flexibility and mobility, objectives that have never been part of traditional technical schools. Pupils completing education in a technical lyceum will have the possibility of taking the secondary school leaving examination, which gives access to university or other forms of further training.

The Ministry of National Education assures that the graduates of the new technical lyceums will be given the same high level of knowledge in general subjects as graduates of general secondary schools. Thus, they would end up having equal chances of continuing their education in university. General secondary-school graduates would therefore cease to have the traditionally exclusive privilege of constituting the main source of recruitment for university students.

The technical lyceum is also expected to provide a solid background for general vocational knowledge as a good starting point for further specialization. It is assumed that specialized vocational skills will undergo changes several times in the course of one's professional activity. These changes will be achieved through different forms of short training and retraining, enabling vocational mobility. The areas of knowledge that are considered particularly helpful for vocational mobility are, among others, financial law and basic enterprise-organization rules.

The preliminary idea adopted for the technical lyceum is the introduction of 14 fields of study covering the main areas of the country's economic activity: administration, economy and finance, social services, other service sectors, environmental protection, mechanics and technology, power engineering, electronics, chemistry, agriculture, timber economy and forestry, metallurgy, textile engineering and transport.

The Ministry of National Education has put particular emphasis in the curriculum on general subjects, which are to be completely prevalent during the first two years of study. There are 28 teaching hours per week the first year, and 27 the second, devoted to: Polish Language, a foreign language, Computer Science, Civic Education, History, Mathematics, Physics, Chemistry, Biology and Environmental Protection, Geography, and Physical Education. The number of hours in these subjects is reduced in Grades 3 and 4 to 16 and 15 hours respectively. Meanwhile, the total number of teaching hours planned for general vocational subjects (Economics, Ergonomics, Technical Drawing, and others) is limited to 2 hours in Grades 1 and 2, and goes up to 15 hours in Grades 3 and 4.

Even though preparatory work on this new type of school has made a lot of headway, it is too early for any further comments on it. At the present stage, local Superintendency Bureaux are jointly examining with the Ministry of National Education the matter of selecting 100 existing vocational schools that will be transformed into technical lyceums. According to information obtained from the educational authorities just before the writing of this report, the World Bank, which was to back this project, had just withdrawn its support.

4.4 The private vocational-education sector

Even though non-public vocational schools are not part of the field study for this report because they are scarce in number and, for now, they remain on the margin of the national VET system, they represent an interesting new trend worthy of some remarks. The first private vocational schools came into operation during the 1990/1991 school year. The following information refers deliberately to the Warsaw voivodship because that is where the major developments in this area are found.

According to the latest data provided by the Ministry of National Education, 47 non-public vocational schools are located in the city and its surrounding areas. This number comprises all types of schools, which are run either by individual people (59.5 per cent) or by institutions with a legal status (40.5 per cent). The total number of students amounts to nearly 8,000. The greatest share of enrolment (75.7 per cent) refers, however, to post-secondary schools. The most common areas of study cover the following branches: commerce and management, the hotel and tourist industry, mechanics, electronics, information technology.

Non-public vocational schools may start operating as soon as they are registered by the local Superintendency Bureaux. Applications, which can be either approved or rejected by the superintendents within 30 days, must include detailed information about the individual people or institutions with a legal status intending to run a given school, define fields of study and teachers' qualifications.

The private vocational-school sector is self-financed. There is, however, a possibility of receiving funds from the state budget, under one condition: a private school must follow the so-called minimum curricula determined by the Ministry of National Education. The school is then allowed to be given resources of up to 50 per cent of the costs per pupil allocated to public schools to cover their maintenance.

As a rule, non-public vocational schools employ highly qualified teachers. The example of the Warsaw voivodship offers an interesting trend in this regard.

The Warsaw Superintendent estimates that the private vocational schools under his control employ 885 teachers. For a considerable number of them, teaching in non-public schools constitutes an extra professional activity: 45.4 per cent of the private-school teachers work in the public vocational-school sector; 21.7 per cent are university staff members. The majority of them have higher-education diplomas and pedagogical qualifications. Only 26.6 per cent of the teachers have not obtained a university degree or completed pedagogical courses. Nevertheless, they are employed by private vocational schools on the basis of their unique qualifications and the particular skills needed for teaching highly specialized vocational subjects. Among these, there are employees who have permanent jobs in banks, hotels and restaurants. The professional status of these teachers determines the kind of agreements they sign with the schools. Only 5.6 per cent of them have regular contracts with the schools, the rest being temporarily employed for a given number of teaching hours.

It is difficult to judge if and to what extent the private vocational-school sector is going to develop. To survive and be successful, it has to be competitive with the public educational institutions. There certainly is a need for the fields of study not covered by public sector: the Warsaw voivodship, for instance, lacks in five-year technical schools specialized in hotel industry and management. Private schools should perhaps fill this particular gap.

Part II

School management: the local perspective

This part of the report gives particular emphasis to the local perspective on vocational education. It is based on a field study in vocational educational institutions operating in the Silesia region and in the city of Warsaw. Presentation of the sample is followed by opinions on school autonomy in the changing economic conditions. New teaching contents are reflected in the curricula of pilot projects implemented by the vocational-school headmasters. Further on, two difficult and challenging issues are dealt with: school workshops after the collapse of state-owned enterprises and school initiatives aimed at raising extra budgetary financial resources. The vocational-school headmasters' different points of view of are included in this chapter.

1. School sample

The choice of the region of Silesia and the city of Warsaw for the field study requires an explanation.

The city of Katowice and the neighbouring urban centres in the region of Silesia represent one of the crucial industrial areas of Poland, with the highest density of coal mines and heavy-industry plants, as well as the highest number of vocational schools – approximately 840 institutions, or 11.3 per cent of the total on the national scale. The schools used to be subordinated to enterprises, with a majority of mining schools run by the coal mines, which determined the fields of study and specializations. Overall control was nevertheless attributed to the State Coal Agency, which conducted surveys of the graduates and the employment demands. At the time of this study, overall responsibility lies with the Katowice Superintendency Bureau, which has nine representatives in the nine biggest cities of Silesia. The Office restructured the schools into systems of vocational education institutions. This means that different types of schools are placed under one roof, but they operate independently. For instance, Electronics Schools in Sosnowiec (Silesia) comprise: a five-grade electronics school, a five-grade electricity school, a four-grade vocational lyceum and a two-grade post-secondary school. Significantly, the range of vocations taught in schools is undergoing considerable change resulting in a much weaker emphasis on mining schools. It is generally acknowledged that the future of the coal-mining industry is uncertain, so the selected schools are of diversified fields in terms of responsiveness to labour-market requirements. They are listed, with their general features, in *Table 8*.

The number of vocational schools in the city of Warsaw and the Warsaw voivodship is the second most important on the national scale, with approximately 380 educational institutions. This data refers only to the public vocational education sector, to the exclusion of non-state schools because, though the latter are increasing in number, they are a new phenomenon and not a representative trend. The Warsaw Superintendency Bureau has only 30 non-state vocational institutions registered in its files, and the Katowice Office has evidence of no more than 8.

Table 8. School sample (Katowice Voivodship)

Name of the school and number of pupils *City*	**Type of the school**
Mining Schools **1200** *Katowice*	2-grade basic vocational school 5-grade technical school 2-grade post-secondary school
Technical Schools **1840** *Sosnowiec*	3-grade basic vocational school 3-grade technical school for graduates of basic schools 5-grade technical school 4-grade commercial school (lyceum) 2-grade post-secondary school
Electronics Schools **1400** *Sosnowiec*	5-grade electronics school 5-grade electrics school 4-grade vocational lyceum 2-grade post-secondary school
Catering Schools **1127** *Tarnowskie Góry*	5-grade technical school of hotel management 4-grade catering school 5-grade technical school of food industry 4-grade vocational lyceum 3-grade basic vocational school
Clothing Schools **580** *Tarnowskie Góry*	5-grade technical school 3-grade technical school for graduates of basic vocational schools 4-grade vocational lyceum 3-grade basic vocational school

The schools were selected for this study on the basis of their diversity of responsiveness to labour-market demands. Their fields of study are directed towards various sectors of the economy: commerce and management, services, electronics, information technology and computer science, among others. The Warsaw and the Silesian vocational schools are located in contrasting economic environments, enabling a wider panorama of the present changes in the Polish VET system. In addition, the schools were not selected among the best nor among the worst. They offer different levels of education. The names and general characteristics of the vocational-education institutions located in the city of Warsaw are listed in *Table 9*.

Most of the headmasters, who were our main informants on the way schools operate, report that their pupils come from families of different social and economic standing, with a preponderance of workers' children. Some schools comprise a more balanced mix of social backgrounds, mainly owing to their fields of study: this is true, for instance, of the commercial schools, the social prestige of which is on the rise, as well as of electronics schools, where only 50 per cent of the pupils are from working-class families. We must point out, however, that data on the pupils' social background cannot be officially confirmed, as this class of information was removed from the school registers three years ago.

The headmasters generally feel that as vocational schools have stopped being almost exclusively reserved for pupils from the working classes, their status has changed for the better: they are now considered to be institutions training for attractive jobs. Evidence of this is that in the city of Warsaw there is presently very little unemployment among graduates of the commercial schools.

It is generally reported that the drop-out problem is relatively marginal, particularly in the case of technical vocational schools. Competition is seen as one of the reasons for this: in technical schools, often one out of four or five candidates is accepted for enrolment through a system of selective entrance examinations, and this process determines an achievement-oriented pupil profile. There seems to be some evidence of a drop-out problem in basic vocational schools, though on a rather minor scale, so that school operation is not disorganized. Young people entering basic vocational schools characteristically belong to a category of 'problem' pupils, whose behaviour is usually explained either by family tensions or by an unfavourable social environment.

The headmasters agree that the problem of drop-outs is not a source of concern. The promotion data at the end of each school year demonstrates that the drop-out rate is never higher than 2 per cent. Headmasters often mention, however, two factors contributing to the relatively low drop-out rate. First, given that so far, the age limit for compulsory education has not been determined on a national scale, schools usually prefer to let pupils repeat a grade rather than make hasty decisions as to their expulsion. The second factor is that the existing score for measuring science achievement is advantageous for the students: the scale has been extended to 6 marks (instead of 5), with the former lowest score still being accepted as passing.

Table 9. School sample : Warsaw

Name of the school and number of pupils	**Type of the school**
Experimental Basic Vocational School **106**	two first-grade classes two second-grade classes
Commercial Schools No. 7 **700**	4-grade secondary commercial school 4-grade secondary school of commerce 2-grade post-secondary commercial school
Commercial Schools No. 8 **950**	4-grade secondary commercial school 4-grade secondary school of commerce 2-grade post-secondary commercial school
Electronics Schools **1600**	5-grade technical school 4-grade vocational lyceum 3-grade basic vocational school 2-grade post-secondary school
Technical Motor Schools **1100**	5-grade technical motor school 4-grade vocational lyceum 3-grade technical school for graduates of basic vocational schools 3-grade basic vocational motor school

2. School autonomy: a limited freedom

School autonomy is a hotly debated subject. There is no question that for the past two or even three years headmasters have been given ever-increasing freedom of action on the school decision-making level, and that they have taken advantage of it. Headmasters make decisions on the fields of study and the number of courses, usually without negative intervention from Superintendency Bureaux. Every school has set up internal committees grouping teachers by subjects. The committee can exercise specific rights as to vocational subjects: by agreement, up to 30 per cent of the teaching contents may be changed; there is some flexibility in the curricula contents in the sense that some areas of knowledge and skills can be moved from one semester to another or from one month to another, but always within one school year; finally, courses may not be cancelled and new ones may not be introduced. Initiatives to alter the teaching contents must originate with the teachers and be approved by the committee, which organizes meetings sometimes as often as once or twice a month. The general objective of the changes consists in achieving a better correlation between several subjects in order to avoid contents repetition.

The procedure is totally different in the case of so-called pilot curricula. Superintendency Bureaux exercise a very far-reaching control and do not allow any changes. The programmes are very strictly supervised by the Ministry of National Education as well. This position, held by both central and local education authorities, is motivated by the fact that the currently implemented new curricula are scheduled for a specific period of time, and that they must be completed in order to be evaluated and, possibly, corrected. Furthermore, prospective employers are involved as partners in the elaboration of the pilot curricula and they expect results that will satisfy their needs. There are cases, however, when teachers have insisted on making some modifications within the framework of the pilot curricula. Such was the case for the field of study called banking business offered in commercial schools. During one of their routine committee meetings, the teachers agreed on a suggestion that the number of classes in bank operations should be reduced. Their only recourse was to pass their proposal on to the bank representatives for further consideration. If and when the bank approves it, the application can then be forwarded to the Ministry of National Education.

The majority of respondent headmasters in charge of pilot curricula, claim that their supposed autonomy is under strict control. They complain that they are not authorized to change the number of teaching hours per subject or the number and type of courses. They argue that after the completion of one school year their knowledge and experience is sufficient for them to decide to introduce these changes, and that if they were allowed to do so, the teaching process would most certainly be improved.

Vocational-school headmasters are allowed to institute one extra hour per week to be used in any way that they deem necessary. Though they certainly make use of this possibility, they do not consider it as fulfilling the need for the autonomy they might expect. According to them, one extra hour per week is nothing. They usually assign this short time to solving immediate problems that arise in a given classroom. Sometimes they communicate some supplementary knowledge in order to fill gaps the pupils might have in particular subjects. Nonetheless, they never manage to use the extra hour to organize a new class, for instance, or to enrich or reshape the contents of the existing curriculum.

Schools express some concern about foreign-language learning. Pupils who studied English, for instance, in primary school may sometimes not be able to pursue it in vocational school because the compulsory language in their field of study may be French or German. A reasonable solution, though organizationally difficult, could be a free choice of the foreign language within the compulsory curriculum, but school headmasters are not authorized to meet such expectations.

According to the generally adopted regulations, schools must organize the teaching process within the framework of subjects determined by the local Superintendency Bureaux. The higher the school grade, the more specialized vocational knowledge and skills are offered. Statistically, general subjects cover up to 80 per cent of the curricula for the first two grades and the proportion diminishes in the classes that follow. From the third grade on, more emphasis is given to vocational knowledge and skills, which cover up to 40 per cent of the time. An example of this aspect of school operations is constituted by five-grade technical-education institutions, where in the first and second grades a pupil studies, for instance, basic elements of technical, technological and electrotechnical knowledge, and from the third grade on the curriculum is enriched with specialized subjects and laboratory courses. The scheme is deliberately designed to give students the opportunity of changing their field of study after the second grade.

3. Pilot projects and their curricula

Pilot curricula constitute a new, positive sign of responsiveness to labour-market needs. For the first time, in the country's changing economic conditions, enterprises are in partnership with vocational schools and have a say on the teaching contents. Pilot projects cover the following range of fields of study: electronics, computer systems, industrial automatization, economy and organization of enterprises, finance and accountancy, administration, banking business, environmental protection (water technology and management, waste processing).

The above fields are being introduced into different types of secondary vocational schools as pilot curricula projects: five-grade technical schools, four-grade vocational schools, two-grade post-secondary vocational schools. School headmasters decide whether or not to implement the new curricula in their schools. They must estimate their own possibilities in terms of teacher qualifications and pupil responsiveness to such a challenge.

The headmasters generally feel that the pilot curricula work most effectively in two-grade post-secondary vocational schools. They claim that this kind of experience requires relatively mature students, as both age and the already acquired knowledge and skills facilitate the learning process. Another advantage is that one does not have to wait too long to evaluate the results. Graduates enter into the labour market after just two years, then corrections of the curricula contents can be considered. This is all the more important that in the course of study nothing can be changed because of the rigorous control exercised by the superintendents and the Minister of Education.

An analysis of the teaching process in the environmental field of water technology, conducted in five-grade technical schools, confirms the previously observed proportions of general and specialized vocational knowledge, according to the year of study. The most intensive study of the very particular areas of professional skills takes place from the third grade on and covers the subjects of biology, water analysis, sewage purification and sewage treatment plants. The pilot curriculum was worked out by the Ministry of Protection of the Environment, Natural Resources and Forestry.

From the headmasters' perspective, pilot curricula are very ambitious projects, often giving rise to difficulties when confronted with the ordinary running of the school. The new environmental-protection curriculum (water technology and management, waste processing) is seen as a particularly complicated programme. The headmasters are very anxious about the present lack of textbooks, and agreements are being drawn up with the Ministry of Protection of the Environment, Natural Resources and Forestry, which will be in charge of preparing the new textbooks in accordance with the contents of the pilot curriculum.

An examination of the school operations show that the pilot curricula are concomitant with the cancellation of previously existing programmes. Commercial schools usually withdraw the traditional field of economics and organization of enterprises from the curriculum because it relates to the old principles of the centrally planned economy and does not apply to free-market patterns. This field is often replaced by a pilot project, the aim of which is to train future trade technicians. It is interesting to note that one of Warsaw's commercial schools preparing trade technicians opened an innovative course called Propaedeutics of the Economy. There are four vocational schools in Poland involved in this entirely new venture, undertaken in collaboration with the Berlin Institute for Vocational Studies. The basic idea is to group three subjects – elements of commerce and management, economics, and law – taught separately in the past, into one subject and add some contents related to banking business, finance and stock exchange operations. Due to the fact that the new subject is very difficult and requires at least a basic level of already accumulated knowledge of the economy, it is studied in post-secondary vocational schools. The teachers in charge of this subject have to be specially trained in seminars in Germany and Poland.

The contents of the pilot curriculum for trade technicians illustrates one of many complex situations demanding strenuous extra training efforts on the part of the teachers. To develop their qualifications, they have different means at their disposal. Foreign assistance in the form of, for instance, seminars abroad, plays a significant, though not primary role. The pilot field for trade technicians, for instance, is backed by the Netherlands, and it is implemented in 11 schools in Poland. The aim of this type of collaboration is to restructure the teaching contents in vocational subjects and organize training seminars for the teachers who are economists, experts in the science of commodities, publicity and marketing. The majority of the teachers who need training take a number of courses within the country. There are also some specialized centres offering some efficient solutions in computer-science training. Finally, the schools themselves organize training on their own premises, with funding from the local Superintendency Bureaux.

The research shows that teachers often group together in teams according to areas of professional interest and involvement. A good example of this is a local electronics teachers' association in the region of Silesia, including sections for those dealing with particular, specialized programmes fed into the computers used in schools during the teaching process.

It should be added that teachers, whose incomes, in comparison with other professions, are extremely low, are not able to cover the costs of training themselves. The local

Superintendency Bureau invests money in various organized forms of training, and the enterprises are sometimes helpful with their support. Although the scale of the initiatives undertaken by the employers is definitely insufficient, there are signs of positive attitudes. One of them is training teachers for the contents of the pilot curricula in the field of banking business. This aspect is developed in detail further on in the report.

Concerning teachers' qualifications, the most recent data shows that 60.3 per cent of teachers have university diplomas, 27.5 per cent are graduates of post-secondary training courses and 11.2 per cent are graduates of different kinds of secondary schools.

The demand for in-service training of teachers employed in vocational schools is increasing. It is usually organized in two ways: institutionally and individually. The framework for the first is constituted by the National Centre for In-Service Teacher Training, local centres of the same kind, and methodology advisers. Individual self-education and self-improvement is not less important, especially in schools that employ young teachers open to new professional skills.

The majority of the headmasters who were interviewed estimate their staff's qualifications as high, due to frequently implemented training measures. Warsaw's commercial schools, for example, force teachers to improve their qualifications by asking them at the beginning of every school year to determine in writing what their training needs are. The teachers are then informed of the possibilities and the types of appropriate specialized courses they are to attend.

However, teachers' qualifications are not rewarded by adequate salaries. The profession has always been underpaid in Poland, both in the old and in the present system. Teachers' monthly incomes are below the average monthly wages and salaries calculated from the main branches of the country's economic activity. Low teachers' salaries do not help to improve their social status, which continues to be undervalued.

4. School workshops

Vocational schools in Poland follow two principles with regard to practical training. It is organized in the school workshops and in enterprises. The first kind of training takes place in the course of the teaching process and it is planned within the curriculum framework. The number of hours for practical training per week depends on the area of study in a given school. The second kind of training usually takes four weeks in the upper school grades that are dedicated exclusively to practical exercises in firms, and during which time pupils have no other classes and do not go to school. Training in enterprises is also included in the curriculum.

Practical training in workshops is a very tough problem in the Polish VET system, directly affecting the running of the school. In general, pupils spend one day per week in the school workshops. Practical exercises usually last five to seven hours. Sometimes they may last longer, as in the case of technical motor schools (up to 14 hours per week). The formal status of the school workshops is a very controversial matter, causing disagreement between the headmasters and the educational authorities: officially, the workshops are supposed to be designed on a profit-making basis and therefore be self-supporting.

In the past, school workshops functioned as small business units in a satisfactory way because they had indemnification rates of remunerative production. Sponsorship by mostly big state-owned enterprises rendered their situation rather stable. The industrial centres also provided schools with material or even equipment free of charge, which guaranteed a proper level of training and a good quality of products.

At present, these kinds of collaborative schemes have practically ceased to exist. A high percentage of the school workshops have given up the status of production-oriented and profit-making centres because the goods they are able to produce are no longer attractive on the market. Moreover, it is beyond the possibilities of local Superintendency Bureaux to maintain and finance workshops functioning on the traditional basis. The future status of practical-training units within the structure of vocational schools has not been determined so far. There were some attempts to organize the Association of Education Managers to be responsible for collecting orders for given products. The Association was supposed to run its own information service providing up-to-date knowledge of the productive activity of the school workshops. This attempt, which was suggested by local educational authorities in the nineties, has so far remained unrealized. Perhaps measures should be taken to re-establish a formula that has already been experienced in past years, consisting of so-called craft exchanges, which were an outstanding opportunity for securing orders for goods produced in the workshops. Craftsmen used to purchase from schools made-to-order products that would otherwise have been considerably more expensive on the market, thus saving money and guaranteeing the schools some income at the same time. Another solution currently being considered is to establish specialized workshop centres for pupils from different schools. The idea is convincing because of its cost-efficiency, especially if there are a number of schools training in parallel vocations in the same city district. Despite a variety of possibilities that could be adopted, the problem of workshops remains open.

The shortage of financial resources and other obstacles raised by the new economic conditions and affecting the operation of the majority of workshops does not mean that all of them are in a deep crisis. Motor schools, for instance, are usually found to have a good infrastructure for practical training supported through collaboration with the automobile factories. The situation is even better when a school runs a garage in which motor vehicles are repaired on a commercial basis. The profits gained through this kind of activity are often allocated to the workshops and cover the costs of maintenance and equipment. Otherwise, selling products is not necessarily a sporadic practice, though it certainly occurs less frequently than in the past. Catering schools replenish their budget this way, especially if they already have a good reputation in the neighbouring community. There is also the case of some electronics schools, the workshops of which manage to operate on a profitable basis. In the course of practical training, pupils produce, for example, electronic devices either for their own use or for the use of other schools with a similar field of study, such as control pilot systems for neon discharge tubes, for which they also have purchasers.

The following opinions expressed by the headmasters confirm that practical training in the school workshops is a multifaceted problem.

The headmaster of an electronics school reports that in the past his workshops used to have a productive activity. Electronic devices and pieces of equipment were successfully sold and had their value on the market. At present, there is no production at all. The big national industrial centres specialized in electronic equipment (for example VERA) are undergoing a deep recession and at the same time the market is filled with high-quality Western goods (television sets, radio-tape recorders, video recorders, computers). This made it necessary for the workshops to change their status: they became subordinated to the schools and therefore dependent on school budgetary funds. Unfortunately, the present situation has a negative effect on the level of practical skills the pupils acquire. The workshops have neither sufficiently modern equipment nor enough materials for practical training. Pupils' work is often limited to simple exercises, such as assembling pieces of electronic devices or repairing deliberately damaged material.

Contrasting opinions were expressed by the headmaster of another electronics school, whose workshops are doing extremely well. He has maintained them on a profit-making basis and they are of no financial burden to the school budget. The school is lavishly equipped in computers with software enabling complicated exercises. Pupils' work, for example, on the simulators of electronic systems and their individual tasks are also evaluated by computers.

5. Schools and their fund-raising initiatives

Selling school workshop products is definitely not the main way of securing financial resources. Although they resort to rather standard methods of raising money, the headmasters must display considerable individual managerial abilities. The financial conditions of the Polish vocational schools vary widely and they are extremely dependent upon local managerial initiatives. It is common for headmasters to devote more of their working hours to such initiatives than to the pedagogical and didactic aspects of the school operation.

The school headmasters declare that they usually dedicate approximately 60 per cent of their working hours to managerial activities aimed at raising money. They discuss the problem openly and are frank about asserting that these activities have nothing to do with the didactic process, which is nonetheless not neglected. In many schools, deputy directors are involved exclusively in all the internal aspects of the school life. This is a very frequent organizational solution imposed by the circumstances.

The most common fund-raising activities are: renting premises for a variety of purposes (foreign-language courses, drivers-license courses, sports training); organizing courses in which the school teachers are involved (the range of educational services is very wide and comprises computer science, accountancy, lessons preparing for university and secondary-school-level entrance examinations); and printing, video-film recording, and photocopying services.

The headmasters judge that renting premises and other forms of profit-making initiatives are unavoidable and will remain a necessary practice in the long run. There are, however, two important points they mention. First, all schools without exception are trying to make money through rather similar means, so competition among them has become increasingly visible. Second, earning power in general on the national scale is decreasing and not everybody can afford extra education in foreign languages or other such services offered by the schools.

An analysis of the fund-raising efforts in schools leads to the following diagnosis: the more a school undertakes profit-making initiatives, the more we can observe signs of an overall successful school operation. The study shows, as well, that in the matter of extra funds schools may count nearly exclusively on themselves.

The headmasters who were interviewed estimate that if they can manage to keep 10 per cent of the budgetary funds transferred by Superintendents Offices for other purposes than teachers' salaries, their situation is not among the worst.

Part three of this report will show that enterprises and business people provide an occasional non-institutional support, which is approved by principals. Schools that accumulate resources through individual initiatives are usually well equipped with computers, which is important because Information Science and Technology is a subject taught in every technical school. If a school is lavishly equipped, which is exceptional but occurs, the computers used in the teaching process are put into the school internal network. It enables management and control operations in the everyday life of the institution (administrative work, files referring to teachers and pupils, etc.).

Part III

Relationship between vocational schools and enterprises

This part of the report is focused on the attitudes of enterprises towards vocational training. A brief description of the responsiveness of enterprises to training in the old economic system is followed by a presentation of their present position in this regard, under the constraints of the new economic context. We shall show some positive examples of the adjustment of vocational schools to the requirements of the labour market in transition: commercial schools and the Polish National Bank, vocational training and coal mines, and the motor-car schools and the Toyota company.

1. Enterprise participation in training in a context of economic restrictions

1.1 Differences between the former and the present economic context

As seen by the enterprises, vocational education offers an inconsistent picture. In Poland, the transition to a free market economy produces a paradoxical situation in which the links between vocational schools and firms are either cut off or considerably weakened. The research demonstrates that it is very difficult to establish new, active relationships between the two partners. In the past, collaboration in this regard worked to everybody's satisfaction. At present, state-owned enterprises, which used to support the vocational schools attached to them, are suffering a deep financial and organizational recession. Many schools run by factories or enterprises have either closed down or have been taken over by local education authorities. The only confirmed links between vocational schools and their closest industrial environments were disconnected at the very beginning of the process of economic reforms.

It is generally acknowledged that practical training in enterprises constitutes one of the greatest concerns for school headmasters. The majority of traditional employers who are active on the labour market, are not interested in training. Newly founded firms or companies are often involved exclusively in their own performance aimed at a prosperous operation in the competitive world of work.

Statistics show that from the total number of 995 vocational schools in Poland still run by enterprises in the 1990/1991 school year – 699 basic vocational schools for young pupils, 29 basic vocational schools for adults and 227 secondary vocational schools for adults – 383 institutions stopped operating in the old managerial and administrative context. Local Superintendency Bureaux took charge of the major part of them, i.e. 334 schools, or 87 per cent of all the institutions from which the enterprises had resigned.

The voivodships of Warsaw and Katowice were among the areas most affected by this procedure. In the region of Warsaw, the data indicates that 55 schools were abandoned by state firms, and in the region of Katowice their number amounted to 27. All of them were taken over by local Superintendency Bureaux and all their pupils were given a chance to continue education under the new authority.

The support given to vocational schools by usually big, state-owned factories and enterprises, called 'patronage', was the predominant solution in the former system. Patronage meant that the essential responsibilities for the school's operation were with the state industrial centres, to the exclusion of teachers' salaries, which were provided by the Superintendency Bureaux. Everything else, comprising school maintenance, workshops and practical training, was guaranteed and financed by the sponsor companies. The current overall situation, however, is complex and requires close consideration. Practical training in enterprises used to be and continues to be the rule for vocational schools in Poland. It usually takes place over four weeks and, in the majority of educational institutions, it involves pupils of Grades 3 and 4. The costs of training are covered by the employers and the process of teaching practical skills is controlled by members of the company staff. Pupils are absent from school for the entire four-week period, but especially appointed teachers visit the firms occasionally and control the training progress. From the legal and organizational point of view no changes have been introduced, so far. In theory, the responsibilities have remained the same: schools have to guarantee practical training and enterprises should not decline to take on students.

In practice, however, in-firm training presently raises a number of problems, of which the financial aspect is not the least. The Council of Ministers decided in 1992, by virtue of special legislation, that schools are to reimburse the employers for the costs of practical-skills training, i.e. all the expenses related to material and energy usage. Rather than applying the principle, schools try instead to convince the enterprises that their pupils' work might be valuable to them and worth a small investment. Another problem observed is that the school teachers' control is not thorough enough, not so much because it is done without any payment, as for reasons of the students' dispersion over a wide area and a vast number of firms, which makes control materially difficult to accomplish.

1.2 The practical-training predicament

As we mentioned previously, the absolute majority of big state-owned companies is no longer able to take in trainees in quantities, as they did in the past. Their interest has shifted totally away from training to basic efforts for economic survival. The research reveals that some schools send applications for practical training to nearly 150 firms without necessarily finding positions for all the pupils. The electronics branch provides a spectacular example. The Warsaw enterprises such as Unitra Cemi (semi-conductors), Warel (electronic equipment), Meratronik (electronic measuring instruments), which used to train pupils on a regular and mutually agreed basis, now take very few trainees or even refuse to take any. Elemis (television-set production), a long-standing partner in the past, is not willing to absorb more than 20 pupils from one school, in fact a comparatively high number by present standards.

The Ministry of National Education has taken measures to encourage enterprises to cooperate in practical training and has decided to pay the company staff who are responsible for the training process. This fund allocation is certainly helpful, but the resources are not sufficient to solve the problem overall.

Pupils are strongly motivated to search for positions themselves because they see them as a chance for future employment. This forces them to examine the labour market carefully and try to contact good firms. If they succeed in finding a position in practical training, the employer must state in writing that they will train the candidate, and the school must give its approval. Nevertheless, with the exception of Katowice Holding, which groups 11 coal mines and assures jobs in them, and the Toyota company (both of which are discussed in greater detail further on) there is no evidence of an interest in training among enterprises. Furthermore, there is no guarantee of a future job after completion of training and no preliminary agreement is signed between employers and trainees. Nonetheless, pupils whose practical skills attract the employer's attention and are highly appreciated in the course of training have a chance of employment. It is important to know that the vocational school certificate must include a separate mark for practical training, which is compulsory for all students and constitutes a prerequisite for graduation.

1.3 An absence of tax incentives

In the new 1990s economic context, neither state-owned nor private firms have developed any form of financial assistance on which vocational schools could rely regularly. Local business, though it is constantly increasing its activities in the labour market, does not express any particular concern in the matter. This can probably be explained by the tax system, which does not encourage business people to invest in schools. The tax deduction is not satisfactory and does not compensate the donation the firms are required to provide when they offer assistance to a school, for example, by giving them computers or other school aids free of charge.

There are at least two facets to this expressed lack of interest: the employment policy of small and medium-sized private businesses, and the tax system in general. On the one hand, small-firm owners prefer employing very young people, with little or no working experience in the big state companies of the old system, as they can be more easily formed for the particular needs of the company. On the other hand, the current unemployment situation puts a large number of qualified people ready to accept a job at the disposal of private business managers, who do not consider it worth their while spending extra money on training new possible employees. If the employees do not fulfil expectations, they can be replaced by others still available on the labour market. As a result, the owner of the small firms do not recruit school trainees. They employ rather already qualified people from the labour market, and transfer to them some complementary knowledge and skills so that they can fulfil the employers' expectations.

The inefficiency of the tax system means that in general contributions imposed by the government do not constitute any serious obstacle for the development of small and medium-sized private enterprises. Though the actual income-tax rate is relatively high, the average collected income tax is quite low due to a common practice of lowering profits by increasing expenses. The inefficiency of the tax-collection system is harmful from a broader perspective: it forces the authorities to raise tax rates, which in turn increases motivation to evade taxes. In fact, only the social insurance contribution is considered to be a serious burden. The biggest deficiency of the tax system lies in the considerable instability of taxation rules, which makes it difficult for companies to adopt a long-term development strategy. The previously mentioned absence of tax deductions on investments is regarded as another disadvantage of the tax system and a barrier to expansion by newly founded firms. This inappropriate tax system does not encourage enterprises to adopt more strategic, long-term solutions. With a better incentive system, enterprises might be encouraged, for instance, to provide vocational schools with modern equipment, guarantee practical training for students and give them a contract for future employment. In this way, companies would be able to control the number of trainees and would secure for themselves fully qualified staff from amongst the students.

1.4 Enterprises involved in the teaching process

A positive enterprise-vocational-school relationship has emerged in the context of the newly introduced pilot projects. Usually, the teachers of highly specialized vocational subjects reflecting the modern technological solutions routinely adopted by enterprises come from the companies. They are never employed full time, but assigned to particular subjects for a determined number of teaching hours per week. They are paid the same as the rest of the teaching staff and, obviously, continue to be employed by their companies, as well. They represent about 20-30 per cent of the teaching staff. The study indicates that these specialists from the industrial world provide a good quality of teaching resulting in highly professional work that pupils must prepare in order to be given their final diplomas. In one of the Silesian electronics schools, 30 per cent of the 1993 diploma productions were installed in the telecommunication transmission centres as professional equipment. In the mining schools, the teachers of mine surveying come exclusively from the industry and share their experience with students. The same is true of subjects in industrial automatization. Warsaw also offers positive examples in the areas of banking business, as previously mentioned, as well as in electrotechnology and telecommunication.

2. Adjusting vocational training to new demands

The transition to a free market economy forced the appearance of mechanisms for the training of skills to meet the demands of employers. However, from the national perspective this process is in a beginning phase and does not relate to the VET system as a whole: labour-market requirements have given an impulse to the improvement of training only in some selected vocations, for which sets of modernized qualifications are being elaborated. There is still a lack of a widely accepted new classification of occupations and specializations supported by an official document, which would constitute a reference for the VET fields of study in the long run. Therefore the reaction of training to the labour market brings merely partial solutions. Although it is generally acknowledged that an updated classification is an urgent task, it is also argued that the problem of high unemployment rates should be solved first and that when this is done, occupations will be restructured both quantitatively and qualitatively.

2.1 Warsaw's commercial schools and the labour market

One experience that attracts particular attention is an innovative pilot project in the commercial schools focused on banking business specialization. Training technicians for this specific vocation became indispensable with the oncoming of the market economy and

Poland's incorporation into the International Monetary Fund and the World Bank. The national banking-system reform introduced in 1989 released nine so-called commercial banks from the organizational structure of the National Bank of Poland and transformed them in 1991, by virtue of a decision of the Council of Ministers, in to the joint stock companies of the State Treasury, with privatization as the final objective. The present system of institutions offering financial services is composed of approximately 100 banks. Newly founded commercial banks (between 1990 and 1992) had to overcome enormous difficulties, including a shortage of qualified employees who, beyond ordinary bank operations, were also expected to deal with leasing, new forms of crediting or stockbroking business. Originally the staff employed by banks came from among graduates of four-grade secondary vocational commercial schools, who had trained in the traditional specialization called Finance and Accountancy. The skills acquired by the graduates turned out to be insufficient.

In 1991, the Ministries of Finance and National Education authorized the National Bank of Poland to initiate and control the implementation of pilot curricula in the commercial schools. A committee established for the elaboration of the teaching contents included representatives of the staff employed in the banks, teachers of the commercial schools and lecturers of the Warsaw School of Economics. They agreed on the implementation of five new vocational subjects which would cover 50 per cent of all teaching contents in Grades 3 and 4 of secondary commercial schools (four years duration) and in the third and fourth semesters of post-secondary commercial schools (two years duration). The new subjects are: Bank Law, Banking System, Bank Operations, Bank Accountancy and Bank Information Technology. Foreign-language learning, mostly of English, takes up four hours per week and starts from Grade 1. In Grades 3 and 4, the emphasis is put on specialized, professional terminology. The total number of schools implementing pilot curricula for the field of banking business amounts to 39, three of which are located in Warsaw. The schools appointed to the pilot project are required to fill two conditions: they must already have experience in training for the finance-and-accountancy specialization and they must be located in cities where there are at least 10 banks.

It is worth emphasizing that the above-mentioned initiative came exclusively from the National Bank of Poland and the formal procedure was given approval by the Ministry of National Education. There were no intermediary partners: local Superintendency Bureaux, in particular, did not take part in the arrangements. A very significant factor of the plan is constituted by a set of obligations the banks decided to accept, which are to guarantee and cover the costs of teacher training (including the textbook expenses) and school equipment (computers), and to be responsible for practical training organized in the banks. The scale of the bank initiatives aimed at improving teachers' qualifications appears to be satisfactory. In 1992, the National Bank of Poland in Warsaw organized five seminars for 149 teachers: 29 teachers were trained in bank operations, 25 in bank law, 37 in banking system, 24 in bank information technology, 34 in bank accountancy. The total cost of training, which was covered by the bank, comprised lodging, catering, transportation, lecturers' fees, textbooks and other school aids. In 1993, 39 teachers participated in two seminars on bank operations. The training programme for 1994 provides eight seminars for 160 teachers of the following subjects: bank operations, bank system, bank law and bank accountancy.

Practical training in the banks is for pupils from Grades 3 and 4 in four-year secondary commercial schools. Practical training is scheduled for four weeks in each of these grades. Students who are in two-year post-secondary commercial schools are also given two practical-skills training sessions: four weeks in the third semester and four weeks in the fourth semester. Every bank involved in practical training must assign one staff member to be responsible for the teaching programme and the selection of employees who will transfer particular skills to the students. The most important training objective is to obtain personal, individual pupils' work in different departments of the institution. The supervisory role of the staff members is not to discourage initiatives coming from the trainees. The latter must also become familiar with the equipment used, including computer programmes. In spite of the fact that the range of practical knowledge to be acquired is determined by the Polish National Bank acting as coordinator, local banks are authorized to introduce changes in terms of their specific needs. A positive evaluation of the practical training is a prerequisite to promotion.

In spite of the fact that the nature of the links connecting schools with this particular type of enterprises is very positive and promising, a mechanism for contracting future employees from among the trained students has not been established so far. The banks express only verbal commitments that the best graduates will be offered attractive jobs, which is certainly not enough. Despite the rare occurrence of post-training contracts, which in any case are limited to students who proved to be the most competent during their practical training, the research shows evidence of graduates from the Warsaw post-secondary commercial schools having been absorbed as employees by one of the local banks.

2.2 *Vocational training and the Silesian coal mine industry*

Vocational schools in the region of Silesia offer a different and interesting example of adapting skills to labour-market needs. The restructuring of the coal mine industry has changed the picture of the mining schools. For one thing, a common trend is now to limit the number of specializations of a purely mining character and replace them by more generally oriented industrial fields, in order to prepare graduates for a variety of industrial branches not necessarily related to coal-mine exploitation. Five-grade technical schools of the mining-school network usually offer the following specializations: Computer Science and Technology, Industrial Automatization, Economics of Industrial Enterprises, Applied Geophysics, Environmental Protection and Mechanics.

At the same time, there are some initiatives to secure continuity in training for the demands of the coal-mine industry. In 1994, the Katowice Holding Company, which groups 11 coal mines in the Silesia region designated two vocational secondary schools to train for the Company's needs. The Holding judged that the teaching contents should comprise the following areas of vocational knowledge: mine surveying, machine mining and underground mining equipment, electric machines and underground mining electric equipment, as well as technology of coal-deposit exploitation. In this last category, the concerned schools are not able to achieve full enrolment.

Neither of these measures, however, are representative of the Silesian VET system. From the perspective of the region as a whole the situation is complex. There is a total of approximately 100 mining schools, which in the past were attached to the coal mines. The latter provided practical ground and underground training and covered its costs. Nowadays, the industrial partners have lost their leading position in training and simultaneously weakened their real involvement in it, as well as their interest in investing in pupils. Local Superintendency Bureaux, which have taken over the responsibility, have made efforts to guarantee practical training through official agreements with the coal mines, but the demand for practical training is much higher than the positions offered. In many cases, to remain profitable, the industrial mining centres have had to sell their ground properties. This affects the workshops in which students used to get practical training, which provided modern equipment and simulators of the technological process of exploitations.

The case of Silesia offers some social aspects that should also be taken into account. The majority of the workers' families consider that vocational schools should provide a quick access to a job and enable their children to participate in the family income. Meanwhile, the official trend is to extend the process of vocational education, stress general knowledge and delay the decision that determines occupational activities in adult life. The data collected in the Silesia region confirm that vocational-school pupils intend to follow their parents', mainly their fathers' pattern, whereby after a short time of training, they received qualified-workers certificates and got a job. It appears that studying for a higher level of knowledge is not attributed a particularly high value. Education is not considered as an investment in the future because it appears to bear no relation to salaries.

2.3 *Example of a foreign company investing in education*

Another illustrative, but not at all representative example of training for the needs of the labour market is offered by one of Warsaw's five-grade technical schools, which has established a strong and direct collaboration with the Japanese motor-car company Toyota. The atypical feature of this experiment is the far-reaching involvement manifested by the employers investing their capital in training. The financial aspect of the venture is unusual because of a general lack of enterprise interest in the money-consuming sponsorship of vocational schools in Poland. The Japanese Toyota Motor Corporation for Poland started their business in 1989. In September 1993, they opened the first car workshop in the Warsaw school. In Europe, there are 82 experimental Toyota classes; the second in Poland began to operate in the city of Poznan. The workshop in the Warsaw five-grade technical school is for 20 pupils who have at their disposal 20 work stations. The total cost of the equipment was covered by the Toyota company. The experimental class starts operating from the second school grade. The first year of study gives teachers the opportunity to have a thorough evaluation of the pupils' science aptitude and achievement, and choose those who perform the best. The students are strongly motivated and obtain excellent results: in fact, the worst students' science-achievement average is the equivalent of 4 on the 6-mark grading scale for academic work adopted in Polish schools. Graduates of the experimental class operating between Grades 2 and 5 receive certificates that give them access to jobs in any car service garage authorized by Toyota. In Poland, there are 36 Toyota service units, 6 of which are run in Warsaw. From the students' perspective, the quality of the school leaving diploma makes it worthwhile. The experiment is a benefit to the company, as well. It gathers a desirable number of students under the school roof to meet the company's future job expectations. If the Toyota classes did not take place in the vocational school, the company would have to carry out all of its training activities in a special centre located in Warsaw, where the costs are much higher because of lodging and catering expenses for students coming from all over the country.

The Toyota initiative had to be approved by the Ministry of National Education. Even though the experimental classes have been accepted and recognized by the Ministry, school autonomy is not strong enough to introduce a comprehensive programme including a particular curriculum for the Toyota classes. The idea of this particular programme would be to organize secondary-school leaving examinations after the fourth year of study instead of passing them after Grade 5, which is the rule for technical schools. The headmaster explains that such an innovation would allow his pupils to dedicate their last year of study exclusively to vocational subjects, strengthened by two days of practical training per week in the local Toyota garages and then one month of consecutive practical training in the company. The idea is fairly justified: secondary-school leaving examinations require a time-consuming preparation with an emphasis on general knowledge. Under this programme, pupils would start their final fifth year of study without the stress of the examinations, and with the necessary time for learning a desirable share of practical skills. Unfortunately, this is still a controversial matter awaiting the Ministry's and, afterwards, the local Superintendency Bureau's approval. The educational authorities are concerned about the type of diploma to confer after the fourth grade of study. Pupils could not receive certificates analogous to the diplomas of general secondary schools because their educational institution is a technical one, nor could they get technician's diplomas because they would not yet have acquired knowledge in all the vocational subjects.

It is thought-provoking to note that regardless of enormous training costs, the Toyota company declares that their expectations will be met if only 10 per cent of the graduates work for the company in the future. They would object, however, if the graduates applied for a job in a car company competing with Toyota.

Conclusions

The process of restructuring the Polish VET system is underway and it is likely to continue for a while. Education belongs to the field of activities where the results appear after a long period of time, so the conclusions of this report may be premature.

Generally speaking, the present management of the VET system continues to be highly centralized. Despite the 1991 Act on Education resulting in a redistribution of managerial power among the Ministry of National Education, local Superintendency Bureaux and school headmasters, the fact remains that the higher the level of the educational authority, the stronger the decision-making power.

Superintendents and headmasters are currently enjoying a degree of autonomy, though limited, which has a real impact on school operation and performance, added to an important impact of the changing labour-market conditions on the VET system.

Though there are significant differences in the ways in which vocational schools function, the area of Silesia and the city of Warsaw, selected as the field study for the purpose of this report, did not show evidence of representative regional discrepancies.

The experience demonstrates that school efficiency depends a lot on the headmasters. Their own managerial abilities – a very important one of which is the ability to raise extra budgetary funds to run the school – and a good collaboration with local Superintendency Bureaux constitute the necessary conditions for a successful operation.

The research illustrates that the most significant changes the VET system is undergoing refer to:

- the cancellation of narrow fields of study;
- an increase of general knowledge and skills needed for vocational mobility and flexibility; and
- later decisions regarding the choice of a future vocation.

These objectives are being targeted through the following initiatives:

- reducing the number of three-grade basic vocational schools and the level of enrolment, as well as limiting the industrial subjects in the curricula;
- introducing new types of schools: the experimental vocational school, which may replace basic vocational schools, and the technical lyceum, which puts emphasis on general vocational knowledge and skills; and
- implementing pilot curricula projects to meet labour-market demands, and in collaboration with enterprises.

The results of these measures can already be noticed. Primary school leavers continuing education in three-grade basic vocational schools diminished from 48 per cent in the 1990/1991 school year to 37 per cent in 1992/1993. If in 1993/1994 pupils preferred the fields of study related to mechanics within the framework of industrial subjects, in 1994/1995 the fields related to commerce and management dominated. On the national scale there are at present approximately 400 vocational schools preparing technicians for vocations dealing with commerce and management. There is now some concern as to the risk of an excessive number of such schools and of their students, who, though they are finding jobs easily today, may find it more difficult to do so in the future. This is an illustration of the problem raised by the current pattern of adjusting to the market demand: it may be efficient in the short run, but will it satisfy more general and long-term needs? All the same, graduates of commercial schools usually find jobs easily and their percentage among unemployed vocational-school graduates is minimal.

Vocational schools of upper and post-secondary levels appear to be the most efficient. Graduates of post-secondary schools are particularly welcome on the labour market thanks to their high level of knowledge and skills. As students, they are more mature than the younger pupils and they assimilate new and difficult curricula contents easier. Innovative pilot curricula are also taught with best results in post-secondary vocational schools.

Despite some visible progress, many aspects of vocational education and training still require improvement. The labour market in transition is not able to establish collaborative links with vocational schools on a regular basis. At the same time, limitations in the degree of responsiveness of the VET system to labour-market demands result from a vague perspective of the country's economic strategy. A more precise official state policy in this regard would be necessary.

Enterprises should be given incentives for involvement in training through, for instance, a revised tax system that would encourage them to invest in education. There is a need to establish forms of student-contracting by employers after completion of the educational process. A system of preliminary agreements between firms organizing practical training and the best students could be a solution. In order to achieve this goal, however, the unemployment rate, which on the national level amounts to 15.7 per cent of the active population and to 7.1 per cent of school graduates of all levels of education, needs to be reduced first. Otherwise, the enterprises will always find already trained potential employees on the labour market.

Vocational guidance and access to up-to-date information on the areas of study required by the changing economy and on the local labour market is extremely necessary. Establishing forms of regular collaboration with local Labour Offices might be helpful.

Practical training in the school workshops is an area that needs a lot of attention and action. In current circumstances of very limited funds for education, the idea of practical-training centres grouping several schools of similar fields of study in a given area could be a partial solution to the problem. Workshops could be divided by specializations and thus the resources invested in the equipment would be reduced. This approach would require, however, more autonomy on the local level. Generally speaking, school workshops should give up their status as small profit-making centres of production. There is very little evidence of school workshops being able to cover their maintenance costs by selling their production.

We would like to stress that VET experiences are very diverse and that a number of different initiatives for the improvement of school operation can be observed. At this stage, however, it is too early to consider these measures as representative of the entire VET system.

References

Bertrand, O. (1992), *Planning human resources: methods, experiences and practices*, UNESCO International Institute for Educational Planning, Paris.

Biuro Studiow i Analiz Kancelarii Senatu (1992), *Bank Swiatowy o polskim systemie oswiaty*, Warszawa.

Blaszkiewicz, A., Kuta, B., Wislocka, A. (1992), *Bezrobocie absolwentow szkol ponadpodstawowych wg duzych grup zawodowych*, "Rynek Pracy", no. 2, p. 31-37.

Caillods, F. (1991), *Educational Planning for the year 2000*, UNESCO IIEP Contributions, no. 4, Paris.

Caillods, F. (1994), *Working file on models of vocational education and training*, UNESCO International Institute for Educational Planning, Paris.

Carnoy, M. (1977), *Education and employment: a critical appraisal*, UNESCO International Institute for Educational Planning, Paris.

CEDEFOP (1993), *Training in transition: comparative analysis and proposals for the modernization of vocational education and training in Poland*, Berlin.

Drogosz-Zablocka, E. (1993), *Ksztalcenie zawodowe w warunkach transformacji gospodarczej w latach 1990-1992*, Instytut Badan Edukacyjnych, Warszawa.

Glowny Urzad Statystyczny (1992), *Aktywnosc zawodowa i bezrobocie w Polsce*, Warszawa.

Glowny Urzad Statystyczny (1993), *Aktywnosc ekonomiczna ludnosci Polski* , Warszawa.

Glowny Urzad Statystyczny (1993), *Oswiata i wychowanie w roku szkolnym 1992/93*, Warszawa.

Glowny Urzad Statystyczny (1994), *Maly Rocznik Statystyczny*, Warszawa.

Hallak, J. (1991), *Educational planning: reflecting on the past and its prospects for the future*, UNESCO IIEP Contributions, No. 2, Paris.

Institut International de Planification de l'Education (1981), *Education, travail et emploi* , vol. I, II, UNESCO , Paris.

Institute for Educational Research (1991), *Changes in Poland. The implications for education*, Warsawa.

Institute for Educational Research (1992), *Education under the circumstances of social and political changes*, Warsawa.

Instytut Badan Edukacyjnych (1994), *Kształcenie zawodowe w warunkach gospodarki rynkowej*, Warszawa.

International Institute for Educational Planning (1980), *The future of education and the education for the future*, UNESCO, Paris.

Kaczor, S. (1989), *Stan i perspektywy szkolnictwa zawodowego w Polsce*, Panstwowe Wydawnictwo Naukowe, Warszawa.

Kolkowski, L., Kwiatkowski, S. M. (1994), *Elementy teorii ksztalcenia zawodowego*, Instytut Badan Edukacyjnych, Warszawa.

Kuratorium Oswiaty (1993), *Raport o stanie oswiaty wojewodztwa katowickiego*, Katowice.

Kwiatkowski, S. M., Szczurkowska, S., Szymanski, M. (1993), *Schools and the world of work under the circumstances of rapid political changes*, Institute for Educational Research, Warsawa.

Livingstone, I., D. (1992), *Specification of research aims*, UNESCO International Institute for Educational Planning, Paris

Ministerstwo Edukacji Narodowej (1994), *Rozwoj oswiaty w Polsce w latach 1992-1993. Raport dla Miedzynarodowego Biura Oswiaty w Genewie*, Warsawa (manuscript).

Ministerstwo Edukacji Narodowej (1991), *Zarzadzenie zmieniajace zarzadzenie w sprawie planow nauczania w szkolach ogolnoksztalcacych oraz zmian w planach nauczania w szkolach zawodowych*, Dziennik Urzedowy, No. 3, Warszawa.

Ministry of National Education (1990), *The development of education within 1989-1990. Report for the International Bureau of Education in Geneva* , Warsawa.

Ministry of National Education (1992), *The development of education in Poland in 1990-1991. Report for the International Bureau in Geneva*, Warsawa.

Organisation for Economic Cooperation and Development (1992), *Report on education and training in Poland during the transformation of the socio-economic system*, Paris.

Rozporzadzenie Ministra Pracy i Polityki Socjalnej o zobligowaniu kuratorow i dyrektorow szkol do obserwacji rynku pracy (1991), Dziennik Ustaw, no. 122, Warszawa.

Rozwoj oswiaty w Polsce w latach 1992-1993. Raport dla Miedzynarodowego Biura Oswiaty w Genewie (1994), Warszawa (manuscript).

Uniwersytet Warszawaski (1992), *Rynek pracy w trakcie transformacji systemowej w Polsce*, Warszawa.

Urzad Rady Ministrow (1991), *Rozporzadzenie Ministra Pracy i Polityki Socjalnej o zobligowaniu kuratorow i dyrektorow szkol de obserwacji rynku pracy*, Dziennik Ustaw Rzeczypospolitsj Polskiej, No. 122, Warsawa.

Urzad Rady Ministrow (1990), *Ustawa o samorzadzie terytorialnym*, Dziennik Ustaw Rzeczypospolitej Polskiej, no. 16, Warsawa.

Urzad Rady Ministrow (1991), *Znowelizowana ustawa o zatrudnieniu i bezrobociu*, Dziennik Ustaw Rzeczypospolitej Polskiej, no. 106, Warsawa.

Urzad Rady Ministrow (1991), *Ustawa z dnia 7 wrzesnia 1991 r. o systemie oswiaty*, Dziennik Ustaw Rzeczypospolitej Polskiej, no. 95, Warszawa.

Urzad Wojewodzki w Katowicach (1994), *Bezrobocie w wojewodztwie katowickim w 1993 roku a inicjatywy lokalne przeciwdzialajace jego skutkom*, Wydzial Gospodarki, Katowice.

Warsaw University (1993), *Polish Policy Research Group Report on Economic Policy of Poland*, Warsawa.

Appendices

Interview questions

Target population:
Ministry of National Education – The Department for VET

1. What is the impact of the new Act on Education of July 1991 and the new Bill on Employment and Unemployment upon the management of the VET system?

2. Which partners are involved in the VET system? What are their responsibilities and mutual relationships regarding decision-making?

3. Do the partners respond to your expectations concerning the distribution of managerial power?

4. How can you describe the cost sharing among the state, the local authorities, the enterprises, and perhaps other partners?

5. To what degree does the shortage of money make the VET system difficult to operate?

6. Are you planning to apply the decentralized model of management and finance?

7. What is your long-term strategy regarding the structure of the VET system?
   (a) How do you see the role of basic vocational schools?
   (b) What are your expectations as to the vocational lyceum?

8. How do you see the role of enterprises in training?

Target population:
Local Educational Authorities

1. What are your responsibilities in the area of vocational education?
   (a) Do you finance courses that are decided by another authority and do you pay the teachers?
   (b) Do you have a say in the type of courses schools offer and in the number of pupils to be trained in different courses? On what basis do you make your decisions?

2. How many and what type of schools do you support?

3. Are your resources sufficient? What kind of efforts do you undertake to raise money?

4. Do you collaborate with firms? On what basis?

5. Can you describe your relationship with the Ministry of National Education?

6. Do you contact training agencies and job centres?

7. Do you cooperate with other partners in training?

8. What would you like to change in the financing of vocational education?

9. Do you evaluate the labour-market needs and if so, how do you proceed?

Target population:
School headmasters

I. Pupils

1. What is the total number of pupils?

2. What is the average number of pupils in the classroom?

3. How many pupils drop out? Who drops out: the best students, the weakest? Why?

4. What social backgrounds do the pupils come from?

5. What are their motivations? Do they study in order to:

   (a) get the job they desire?
   (b) have a good salary?
   (c) enter the labour market quickly?
   (d) receive the school leaving certificate?
   (e) have access to further education and training?
   (f) have a scholarship?

II. The teaching process

1. What is the proportion of general subjects to vocational subjects?

2. How is the learning process organized?

   (a) number of hours per week in the classroom
   (b) number of hours per week in a workshop
   (c) number of hours per week in an enterprise

3. Which foreign languages are taught? Are they chosen freely?

4. Is computer science taught in schools?

5. Is the headmaster authorized to change the number and type of courses?

6. Who takes the initiative – the headmaster, the enterprise, or another institution?

7. Is it easy to shut down an old course and open a new one? Or is it difficult? Whose approval needs to be obtained?

8. Can the contents of curricula be determined locally by a school (or a group of schools of the same type)?

III. Teachers

1. Are they employed full or part time ? Which solution prevails?

2. Is there a high turnover? Do many teachers leave?

3. Are they recruited from enterprises?

4. Do they contact firms on a constant basis or only occasionally?

5. Do they have other activities?

6. Are they sufficiently qualified or do they need training?

7. Do they know the local economy? Where does their knowledge of it come from?

8. Does the headmaster organize meetings with the staff? How often? For what purpose?

9. Does the headmaster contact:

   (a) local enterprises?
   (b) business people?
   (c) local authorities?

For what purpose does he contact them and what does he do with the information obtained? What difficulties does he face in contacting them?

10. Does the headmaster follow up on the school graduates?

IV. Enterprises

1. Do the enterprises supply information on local labour-market needs and do they transfer it to the schools?

2. Do they express demands regarding new skills?

3. Are they interested in training or not?

4. Do they pay for it? How are costs shared?

5. Do they provide equipment?

6. Do they contract future employees from among the students?

V. Funding

1. What is the main source of funding for the school and is it sufficient?

2. Who finances workshops? Are they run on a commercial basis?

3. Does the school undertake any kind of initiative in order to get financial resources?

    (a) Does it sell products?
    (b) Does it give advice to enterprises?
    (c) Does it rent premises?

4. Are the local authorities and business people of any help and support?

Target population: **Enterprises**

1. Do you know how many skilled workers and technicians you need in the medium term?

    (a) Did you recruit last year? If so, how many workers and technicians were recruited for different types of jobs: skill level (unskilled/skilled, technician) and specialization?
    (b) Are you recruiting this year?
    (c) Do you plan to recruit next year?

2. To what degree are you interested in training?

    (a) Do you pay for it and how?
    (b) Do you support a school directly?
    (c) If so, what type of school is it?
    (d) Do you provide schools with the equipment they need?
    (e) Do you have workshops?
    f) Are any members of your staff directly involved in training students?
    g) Do you receive students from schools?
    h) Do you employ your trainees afterwards or do you look for qualified employees elsewhere?

3. What do you think of the quality of vocational-school leavers and what is your idea of the value of their certificates on the labour market?

4. Do you maintain contacts with local authorities, institutions dealing with employment or others?

5. Do you think that you are benefitting from the present management system? Do you use the possibilities it offers sufficiently?

6. From your perspective, which problems within the VET system need to be solved most urgently?

Changing teaching/learning conditions in the industrial vocational training institutions and employment situation of graduates in Lithuania

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Introduction

Lithuania has inherited an educational and vocational training system characteristic of totalitarian regimes, which was introduced during the Soviet occupation of the country (1940-1990). In fact, the first victims of this occupation were the country's teachers and professors, who were exiled to Siberia together with the more educated people of Lithuania, including politicians, diplomats, officers, business people and rich farmers, most of whom died in Siberia. Furthermore, numerous intelligent people emigrated to the West after World War II, while many teachers and students lost their lives in the 1944-55 partisan war of resistance against Soviet occupation. In all, between 1940 and 1950, Lithuania lost one million inhabitants, i.e. a fourth of its population, most of whom were highly educated, intelligent and active.

A totalitarian educational system typically has two main goals: first, to prepare the individual to accept the totalitarian way of governing and its control, to stick to the system, and to maintain, support and defend it; second, to keep individuals under control while developing in them the qualities of collectivism, and to prepare them for their role as a small cog in the big state machine. The system ignores personality development and specific individual characteristics. The entire content of education, its methods of selection and of transmission of knowledge, its organization and management are geared to achieve these goals. One of the specific goals of education in Lithuania – as well as in the other Baltic countries – was to convince students that Soviet occupation of the country was legal and permanent.

The socialist orientation of the education required that only characteristics that were of use to the state be developed in an individual. Therefore, attention was directed primarily to vocational education and to preparation for working according to the state's needs. In practice, this meant that in the basic school, vocational training was introduced simultaneously with general education, and science and technical courses were given priority over humanities and civics. The latter had a very ideological content and served mostly as propaganda for the achievements of the Soviet system. Knowledge of science and technical skills was mostly elementary: its relation to practical life and needs was not explored, and it was not given as a means to develop a broad world outlook. Education was aimed entirely at developing obedience and a non-critical acquisition of knowledge and skills.

Such deliberately oriented education called for a very centralized system of organization and management, which was controlled by the Communist Party: all curricula and programmes were rigid and uniform, and all educational and training institutions were under the strict supervision of the authorities, the Communist Party and the KGB. The education directors and the supervisors were not educated in the regular educational system – they were sent to special Communist Party schools and courses after having been selected during their studies or in the practice of their job. They were expected to be not only good professionals, but also very obedient to the authorities and faithful to the Communist Party. In this context, creativity and initiative were considered to be weaknesses. In sum, this educational system was designed to generate a uniform, obedient labour force and to produce a standard format of human being, serving the aims of the state and ignoring the interests of individuals, the family and educators.

The vocational training system turned out highly specialized workers according to the needs of industry, to which it was very strongly linked. The result of such specialization was to attach people to their factories and work places without their having any possibility of making some kind of choice or of moving.

Industry in Lithuania was developed in such a way that the greater part of its raw-materials supply and the majority of its customers were not domestic, but distributed throughout the whole of the Soviet Union. One of the aims of this development was to achieve an irreversible integration of the occupied country into the Soviet Union. Thanks to the strong level of culture, science and education in Lithuania, the industry that was developed there was in the high-technology category, including electronics, machine-tool production, chemical industry, and so on; Lithuania was also where the most powerful nuclear power plant in Europe was built.

When the Communist system collapsed in 1991, Lithuania restored its independence, and began building a new democratic society and a market economy. The new independent state met with many problems in the restructuring of its economy due both to economic pressure on the part of Russia, and to its concomitant loss of suppliers and customers. As a result, industry in Lithuania has broken down, with most of the big factories and other institutions going bankrupt, and thousands of previously employed people having to find new jobs.

The vocational education system, though it is now free of its rigid link to industry and of Moscow's control, is presently facing many problems. The general-secondary and higher-education system is adapting to the new conditions: many researchers, progressive teachers and professors are involved in reforming the educational system in general and secondary general education in particular. However, there is no reform strategy for the vocational training system, and there are no laws covering vocational education.

Vocational education and training institutions are presently trying to find new ways of surviving under the new conditions of self-dependency. Generally speaking, they do not have the intellectual potential and financial resources to develop and implement innovations. Industrial vocational education institutions are in the worst position of all, as they have lost their former social partners while the new generation of social partners is as yet quite fragile and has a weak demand for new labour power. Some institutions are managing well but most are having to deal with numerous problems.

This research project, conducted in the framework of the IIEP[1] *Programme for Training Researchers in the Management of Vocational Education and Training Systems* aims at analysing the situation of industrial vocational education and training institutions and the employment of graduates under the conditions of the present radical socio-economic changes in Lithuania.

This report focuses on vocational schools and colleges, the two types of schools providing vocational education, training skilled workers and technicians for the big industrial enterprises of the past. This was formerly the most developed sector of the vocational education and training system: it was extensive, modern and had very close connections with enterprises. Today, these industrial vocational education and training institutions also have the biggest problems: the manufacturing sector being particularly affected by the new economic context, many of the schools have lost their partners, and their overall number of applicants is decreasing. All the problems of the current transition period are concentrated in this type of school. We have selected two levels of vocational training institutions: five vocational schools, dealing mostly with graduates of basic secondary schools, and three colleges, dealing with graduates of upper secondary schools. Research was conducted in two different regions of Lithuania: in the capital, Vilnius (584,400 inhabitants), and in Alytus, the sixth biggest town with 77,400 inhabitants. Alytus is quite a modern, industrial town that has undergone intense development over the last twenty years. This choice was made on the assumption that relations between educational institutions, local authorities and employers are different in big and small towns.

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[1] International Institute for Educational Planning, UNESCO, Paris.

Two methods of research were adopted for this study on vocational education and training institutions and their environment:

- interviews with headmasters and principals, managers of the vocational education and training system, employers, and representatives of labour agencies; and
- a follow-up study consisting of a statistical survey based on questionnaires mailed to students who graduated the previous (1993) year from the same schools.

The *first two chapters* provide an overview of the vocational education system and of its socio-economic environment, and the *third chapter* gives the picture of financing and management of the targeted vocational institutions. *Chapter four* draws the main conclusions of the interviews and *Chapter five* analyses the results of the survey.

1. The socio-economic environment of vocational education and training

1.1 Economic context

The economic and the social situation in Lithuania is a subject of widely differing opinions among Lithuanian analysts and foreign experts. The pessimists are pointing to the collapse of industry, production's decreasing in all economic sectors, runaway inflation, the high level of centralization in the economy, the economic, demographic and environmental crisis, the unsuccessful and slow privatization process, and the increase in crime. The optimists are emphasizing the fast development of the market economy, the strengths of privatization, the development of new economic areas, the renewal and development of some old industries, the generation of a new society of business people, and some macroeconomic stabilization.

The main reasons for such differences of perception are due to the specificity of the process of change in Lithuania and other post-Communistic countries. In fact, the rise and development of new market-economy relations are concomitant with the collapse and destruction of the old totalitarian socio-economic system. Lithuania was occupied by the Soviet Union for 50 years, during which all important decisions on developments in policy, economy, industry, human resources, education and culture were made in Moscow. Domestic authorities could only elaborate tactical projects for the implementation of the strategic plans that came from Moscow, and even that was always done under the supervision of the Communist Party. A whole generation of executive managers and researchers in the fields of economy and social sciences was formed to have only one goal: to implement successfully Communist Party decisions. Strategic planning and creative decision making were forbidden – this was Moscow's prerogative. The current social and economic changes are producing 'winners' and 'losers', where the 'losers' are those who are mostly resisting the reforms, and they still carry a lot of weight in the present situation of Lithuania.

The economic changes in Lithuania are genuine, and especially manifest in the growing private sector. In 1991, 70.3 per cent of all employed persons were working in the public sector, and 15.5 per cent in the private sector (14.2 per cent were employed in the so-called state-cooperative sector). In the middle of 1993, the rates were 47.6 per cent and 52.4 per cent respectively. Private farmers produced 70 per cent of agricultural goods in 1993. Another very important sign of the changes is the establishment and development of new businesses and trades in Lithuania, primarily in the field of services, such as banking, insurance, tourism, financial mediation, international freightage, real estate, foreign trade re-exportation, and others. We now have 30 private insurance companies and 25 commercial banks, the latter of which are paying 20 per cent of all taxes collected from companies, amounting to 5.8 per cent of state revenue for the state budget in 1993.

When talking about the private sector of the economy, we need to keep in mind that the official statistics do not reflect the real picture, which also includes non-official private business. In the opinion of the Lithuanian Institute of Information approximately 50 per cent of private business takes places in the 'shadow' economy. In addition, most of the official companies do not reveal real figures for their turnover and profits.

GDP fell about 7 per cent in 1990, 15 per cent in 1991, 37 per cent in 1992, and 16 per cent in 1993. The main reasons for this downward trend were the decline in trade with Russia and the former Soviet republics, and increasing prices for raw materials and energy.

Table 1. The structure of GDP

	1991	1992
Industry	55.7%	36.9%
Energy		2.5%
Agriculture	19.2%	21.3%
Construction	4.7%	5.5%
Transport and communications	7.0%	4.6%
Trade	?	12.3%
Banking	2.1%	8.6%
Other	11.3%	8.3%

Source: Lithuanian Department of Statistics.

Industry. Industrial production has been declining in Lithuania since 1990.

Table 2. Industrial production in Lithuania, 1993

Food and beverages	27%
Petroleum products	25.6%
Textile and knitwear	8.8%
Radio, TV and communication equipment	6.2%
Machines and equipment	5.7%
Chemicals and products	5.3%
Non-metal mineral products	3.8%
Other	16.8%

Source: Lithuanian Department of Statistics.

Table 3. Dynamics of Lithuanian industrial production

1986	1987	1988	1989	1990	1991	1992	1993
+ 5.3%	+ 4.6%	+ 5.7%	+ 4.2%	- 2.8%	- 4.9%	- 51.6%	- 46%

Source: Lithuanian Department of Statistics.

During January-June of 1994 production of goods was 37 per cent lower compared to the same period in 1993.

Table 4. Volume of industrial production and employees

	1990	1991	1992	1993
Volume of production (%)	100	95.1	46.0	24.9
Number of employees (%)	100	94.5	82.3	66.6

Source: Lithuanian Department of Statistics.

National currency: litas. The lita was introduced in June/July 1993. In April 1994, the lita was pegged to the US dollar at Lt 4 = US$ 1.

The volume of production in 1993 was 10,000,000 litas.

In 1993, industry was employing 325,000 people.

The continuous decrease in industrial production is caused by an orientation to old technologies, and an absence of a relation between the real needs and strategic interests of Lithuania and the industrial profile. Industrial management is old-fashioned and does not support innovations. Industrial renewal, in this situation, would require big investments, restructuring, and a redistribution of labour power.

Some positive trends can be observed in industrial developments: (a) a gradual stabilization of some industries, including mainly fuel production, textile and furniture, and fertilizer production, which began by entering a recession, then accomplished some reforms and some restructuring, found the foreign market, and are now introducing new technologies; and (b) the structure of capital investments is changing in that it is increasing its share in non-productive areas, and that productive investments are directed at new technologies, restructuring, and modernization.

One typical example of what industry in Lithuania is going through is the Sigma computer enterprise in Vilnius. In 1991, it produced 40 kinds of products, the most important of which were computer complexes for the control of technological processes and banking machines, and components for military computer technology. The enterprise had seven factories employing 17,000 people and a research-and-development institute comprising 500 researchers and engineers. It had customers in all of the Soviet Union and in the military complex as well. All programmes were financed directly from Moscow by the Soviet Government. The Kaunas Polytechnic Institute trained computer engineers, a couple of the technicums (specialized secondary schools) trained technicians and technologists, and the qualified workers were trained in a number of vocational schools under very specialized programmes conforming to enterprise needs in something similar to a 'dual' system.

In 1991, after the disintegration of the Soviet Union and the borders' opening, Sigma production was not able to compete with Western computer production. Consequently, it lost its market share and ran into considerable problems: most of its factories in the various provinces went bankrupt, the main factory reduced its staff from 4,500 to 1,600 employees, and the research institute was closed down. Present average monthly wages are Lt

200 (US$ 50). The company began to produce computers equivalent to the IBM XT model, but at a retail price of $US 3,000, they have no market. The enterprise's only competitive product at present is a computerized telephone station. The company delivers 80 per cent of its overall production to the former Soviet Union and has no exports to the West. Sigma has been on the list of companies marked for privatization to obtain hard currency since 1991, but nobody has wanted to buy it. According to the Production Manager, K. Simonis, its only chance of survival is to be privatized and be boosted by foreign investments, but presently the future itself is in question, as the best specialists are leaving the enterprise and vocational-schools graduates are being recruited to take their place.

Inflation. During its 50 years of Soviet occupation, the economy of Lithuania was industrialized according the strategic economic and political needs of the USSR. Lithuania was forced to introduce and develop a machine-tool production industry, ignoring the real needs of the Lithuanian population in goods and services. After independence, inflation began to increase rapidly.

Table 5. Inflation-rate dynamics in Lithuania

	1991	1992	1993	1st half of 1994
Rate of inflation	225%	1120%	189%	23%

Source: Lithuanian Department of Statistics.

Foreign trade occupies an important place in the Lithuanian economy.

Table 6. Foreign trade in 1993 (billions of litas)

	turnover	import	export	balance
Data of Department of Statistics	10.94	5.60	5.34	-.27
Data of Department of Customs	15.32	6.62	8.71	+2.09

Source: Lithuanian Department of Statistics.

Table 7. Export and import of Lithuania in 1993

	Export		Import	
	bil. litas	Per cent	bil. litas	Per cent
Russia and CIS	3.33	62.5	4.70	83.7
EC	.72	13.5	.38	6.8
EFTA	.25	4.7	.15	2.6
Central and Eastern Europe	.92	17.3	.17	3.0
America	.05	0.9	.11	1.9
Other countries	.06	1.1	.11	2.0
Total	5.34	100	5.61	100

Source: Lithuanian Department of Statistics.

In 1992, trade with Russia represented 79 per cent in imports and 50 per cent in exports. The biggest import-export flow in 1994 for Lithuania is still with Russia – 34 per cent – but the picture is changing as exports from Lithuania to the Western countries are increasing rapidly.

Table 8. Lithuanian exports in 1994 (Per cent)

	January	February	March	April
Exports to the Western countries	11.4	13	13.8	15.2
Exports to the former USSR	41.5	34.2	32.7	30.8
Domestic trade	47.1	52.8	53.8	54.0

Source: Lithuanian Department of Statistics.

In 1994, Lithuania exported mostly furniture, paper, machinery, electric and electronic equipment and devices, and chemicals. Imports include energy, oil, gas, metals, chemicals, vehicles, and special equipment.

Investments. According to the official statistics of the Ministry of Economy on 10 August 1994 there were 4,019 foreign companies and joint ventures in Lithuania with a stock capital of Lt 782 million. Foreign investments represent 57.6 per cent of this sum, or Lt 450 million. There are 3,070 joint Lithuanian and foreign ventures and 949 foreign companies. Joint ventures have Lt 687 million and foreign companies Lt 95 million in capital.

Russia represents the biggest number of joint ventures and foreign enterprises, with a total of 986 (814 joint and 172 foreign), followed by Germany with 679 (536 joint and 143 foreign), Poland with 612 (466 and 146), the USA with 258 (181 and 77), Byelorussia with 167 (141 and 26), Sweden with 100 (64 and 36), Great Britain with 89 (55 and 34), Denmark with 80 (54 and 34), Latvia with 68 (43 and 25), and Estonia with 68 (35 and 33). At this moment, 81 country have joint or foreign companies in Lithuania. The biggest foreign investments come from Great Britain (25.7 per cent), Germany (17.7 per cent), the USA (11.9 per cent), Russia (6.7 per cent), Austria (6.3 per cent), Poland (5.4 per cent), Ireland (3.2 per cent), Switzerland (3.1 per cent).

Privatization began in Lithuania in 1991. The Lithuanian Government marked two-thirds of state-owned property for privatization.

Table 9. (a) Number of privatized companies and enterprises (1991-March 1994)

	To be privatized	Privatized	%
Industry	1319	216	15.53
Transport	203	130	64.04
Construction	940	634	67.45
Trade and commerce	1416	1154	81.50
Public services	319	262	82.13
Services	1428	1228	90.20
Others	2179	933	42.82
Total	7876	4617	58.62

Source: Lithuanian Department of Statistics.

Table 9. (b) Privatized enterprises and companies by branches of the economy on 1 April 1994

	Big enterprises		Small companies	
Public branch of the economy	Number privatized	Public capital value (1,000 litas)	Number privatized	Public capital value (1,000 litas)
Industry	546	288,112	39	277
Transport	115	18,150	7	43
Construction	484	66,693	18	288
Trade	421	39,179	1,050	3,580
Public service	46	6,728	147	771
Services	171	6,612	748	2,425
Other branches	343	52,061	382	2,585
Total in Lithuania	2,126	477,534	2,391	9,969

Source: Lithuanian Department of Statistics.

Most of the problems in industry and industrial employment during this period of economic transition, are related to the inability of industrial giants to adjust to the market economy. *Table 7* shows that only 15.5 per cent of industrial companies and enterprises are privatized. In many cases, the new owners are the former factory managers, who are not the best prepared to lead an enterprise in the competitive conditions of the market economy. The future of the largest share of state-owned industrial factories is uncertain, as well as that of many employees in the industrial branches of economy, who have remained in the same job.

The current state of Lithuanian industry as we have just described it makes the situation of vocational education and training institutions impossible to determine. If industrial development takes off again, the vocational education system must be ready to train the labour force. If, however, industry turns out to be greatly and irreversibly reduced, many schools will have to be shut down or reformed radically.

1.2 Employment problems and official statistics

According to the Department of Statistics the official definitions of labour force, the employed, the non-employed, and the unemployed are the following:

The *labour force* consists of all the economically active population which includes both *the employed*, the *non-employed*, and the *unemployed*.

The *employed* are people of working age (16-55 years for female and 16-60 years for male) working in different spheres of economic activities, serving in the army, or are serving a prison sentence. They include those who have a job but are not working for a certain period because of different reasons, while maintaining with an employer an official contract that guarantees their return to a position in the work place.

The *non-employed* are those who are not working but are seeking a job, are registered in the Labour Agency, and are ready to begin work at any time, whether or not they are receiving employment benefits.

The *unemployed*, a subset of the previous category, are those who involuntarily have no job and no wages, are registered in the Labour Agency, are willing and able to work, and are receiving social benefits for a specific period of time.

Table 10. Population, labour force and employment

Year	Total population (1,000)	Total labour force (1,000)	Employed labour force (1,000)	Non-employed labour force (1,000)	Labour force activity rate (%)*	Non-employment rate (%)**
1989	3,691.1	1,903.3	1,903.3		51.6	
1990	3,722.3	1,852.7	1,852.7		49.8	
1991	3,741.7	1,902.8	1,897.6	5.2	50.9	0.3
1992	3,741.4	1,879.3	1,855.2	24.1	50.3	1.3
1993	3,730.2	1,859.3	1,778.2	81.1	49.8	4.4

* Ratio of the labour force to total population.
** Ratio of the non-employed to the labour force.

Source: Employed and non-employed population, 1994.

Changes in the socio-economic context have influenced the employment rate and its structure over the last three years (1991-1993). During this period the total population, the working-age population, and the rate of labour-force activity decreased and the rate of non-employment increased (*Table 10*), as the number of the non-employed and the unemployed grew and the number of job offers fell. In contrast, privatization and the development of the market economy influenced employment in the private sector, which progressed: from 29.8 per cent in 1991 it grew to 41.3 per cent in 1992 and to 54.2 per cent in 1993. The development of the market economy also produced notable changes in the employment structure according to the spheres of economic activity (*Table 11*).

Table 11. Employment distribution by sectors of economic activity (1992-93)

	1992 (Per cent))	1993 (Per cent)
Agriculture, hunting, forestry and fishing	19.6	22.5
Mining and quarrying	0.3	0.2
Manufacturing	26.9	23.6
Electricity, gas and water supply	1.6	1.9
Construction	9.1	7.1
Wholesale and retail trade	6.9	9.7
Restaurants and hotels	1.0	1.1
Transport, storage, and communication	6.7	5.6
Finance	0.8	1.2
Real estate, renting and commerce	2.3	2.2
Public administration and defence, social security	2.7	3.2
Education	7.4	7.7
Health and social work	5.6	5.4
Social and personal service, other community	9.1	8.6
Total	100.0	100.0

Source: *Statistics Yearbook*, Lithuania, 1993.

This table underlines the serious recession that has affected the manufacturing sector and the progression of a few services, such as trade, finance and security, or social services. The growing share of agriculture is in fact a reflection of a situation of underemployment: when privatization started, people recovered their parents' and grandparents' land and returned to farming; a number of workers who became redundant in manufacturing found a kind of shelter in agriculture, despite the non-competitiveness of the sector. According to an analysis of Labour Agencies data through 1 January 1993, 101,600 persons were officially 'employed' in 188 enterprises, but were in fact not working full time – either only part of the week or part of the day, and sometimes in other working places as well. On the average about 5.2 per cent of the employed were on forced leave and 8.1 per cent of them worked part-time in manufacturing in 1993. The dynamics of underemployment in manufacturing and industry in 1993-94 is shown in *Table 12*.

Table 12. Underemployment (1993-1994)

Quarter of the year	Forced leave	Part-time (per week or per day)
1993		
I	23,400	54,700
II	20,300	58,200
III	23,500	30,400
IV	20,700	35,100
1994		
I	15,800	38,000
II	25,100	29,800

The first unemployed people were registered in Labour Agencies in March 1991. At this time, the majority of the unemployed were highly educated personnel (specialists with higher and college-level education). At the end of 1992, the proportion of non-employed workers (skilled and unskilled) and specialists (professionals, technicians) was approximately balanced (47.3 per cent and 52.7 per cent respectively). At this period, 1,700 college and high-school graduates registered as unemployed in Labour Agencies. Jobs were available for 35 per cent of high-school graduates and 60 per cent college graduates. It was particularly difficult to find a high-level job in the following spheres of activity: agriculture, forestry, energy, manufacturing, construction and architecture, culture and arts, preschool education, economics, and planning. Part of the graduates were forced to take a less qualified job.

The structure of non-employment changed in 1993 when unemployment became more serious among the less educated workers. It also increased more in rural areas and in small cities than in large cities, and among people under 25 years and near retirement age. Moreover, the average duration of unemployment increased.

The distribution of the non-employed by educational level in 1993 and 1994 is shown in *Table 13*.

Table 13. The non-employed labour force by educational level

Quarter of the year	Non-qualified labour force	Vocational school or in-plant training (total)	College	High school / University
1993				
I	23,642	48,718	16,884	5,721
II	20,321	44,913	15,366	6,751
III	15,819	33,125	12,062	6,190
IV	16,763	31,656	11,782	5,266
1994				
I	18,826	32,041	12,283	4,852
II	15,569	28,480	10,592	4,359

Source: National Labour Agency.

According to *Table 13*, people with a vocational-school and in-plant-training educational level constitute the most important group among the non-employed. This could be due to a problem of inadequate qualifications of workers and to the disequilibrium in the supply and demand of the labour market. The labour market is full of skilled workers but their qualifications are too low and their specialization too narrow to meet employers' requirements.

Table 14 displays general information on non-employment and unemployment.

Table 14. Rate of job-seeking non-employed, and unemployed

	Non-employed (1,000)	Unemployed (1,000)	Rate of non-employed (Per cent)	Unemployment rate (Per cent)
1992 Ist Quarter of the year	15.1	5.2	0.8	0.3
1992	24.1	9.4	1.3	0.5
1993	81.1	30.4	4.4	1.6
1994 Ist Quarter of the year	68.0	29.2	3.7	1.5
1994 IInd Quarter of the year	60.0	26.0	3.8	1.4

This table shows that non-employment and unemployment increased in 1992-93 and decreased in 1994. There are two interpretations for this. The first relates these changes to a stabilization of the situation in the labour market, and even an improvement of it. The other is related to the social, economic and political conditions in 1992-94. The growth of non-employment was linked to the abolition of restrictions in dismissing the employed from public enterprises and a policy of high social benefits in 1992. The stabilization of the labour market in March-June in 1993 could be related to the decision to limit social benefits.

At present, the information of the Labour Agency does not show the real unemployment situation in Lithuania because there is also a non-official labour market . Pocus (1994) estimates this market to include 250-280,000 people in 1993.

The reality of unemployment is better reflected by the non-employment level than by the unemployment level, strictly speaking. Part of the non-employed are not included in unemployment figures because they are getting some help from family, relatives, and acquaintances. Furthermore, part of the private enterprises do not provide accurate information about the number of their employees, as some of them work without contracts. According to Pocus (1994), these non-official employees are increasing in number and could amount to 50-80,000, some of whom might be registered in the Labour Agency.

This means that official statistics do not reflect the real situation of unemployment but only the main labour-market trends. A broader analysis of the economic activities of the population and its demographic characteristics is necessary; information about the employed population needs to be more extensive (including, for instance, educational level) and periodical; in addition, the data indicators in Labour Agencies on the educational level of the non-employed needs to be more specific, because at present information on the non-employment rate of persons from vocational schools is not accurate; VET (Vocational Education and Training) institutions need to be informed about the real situation in the labour market on the basis of a study of supply and demand; and a description of the priorities in the different spheres of economic activities needs to be made at the national, urban, and rural levels.

2. Vocational education and training: past experience and current reforms

2.1 The former VET system

The main goals in the field of education until the annexation of Lithuania by the Soviet Union in 1940 were to attempt to preserve national identity, to abolish illiteracy, and to develop vocational education and apprenticeship.

The first low and high vocational and apprenticeship schools were established in Lithuania in 1919. The Law on Apprenticeship Education was passed in 1929 and General Regulations were introduced to order the activities of apprenticeship schools in 1931. These regulations defined two types of apprenticeship schools: secondary (with a four-year term of study) and lower (with a two/three-year term of study).

Art, music, technical, trade, and apprenticeship schools, and commercial gymnasiums were under the supervision of the Ministry of Education, the police school was under the supervision of the Ministry of Internal Affairs, the military and military aviation schools under the supervision of the Ministry of Defence, and the agricultural schools under the supervision of the Ministry of Agriculture.

In 1938 and 1939 there were 78 apprenticeship schools and courses, 38 agricultural schools and courses, some college-level technical, agricultural and other schools, 3 schools of higher-learning (Kaunas Vytautas Magnus University, Veterinary Academy, Academy of Agriculture).

In 1940, a new agricultural education plan was drawn up but, due to the Soviet occupation, it never saw the light.

During the Soviet period (1940-1990) the VET system in Lithuania became too ideological, political, centralized, and planned. The policy that governed it was determined by ideology and the planned economy of the USSR. Apprenticeship and vocational schools were nationalized and attached to the Republican Board of Labour Reserves in 1945. There were two-year apprenticeship and six-month factory and workshop training schools, in which qualified agricultural workers were trained as of 1953. In 1956, technical schools were established where graduates from secondary schools could study. The Labour Reserves schools were reorganized into town and rural vocational-technical schools and the Republican Board of Labour Reserves became the Vocational Technical Training Committee in 1959 and operated until 1988.

In the 1960s and 1970s there were vocational schools (with 2 – to 2.5 – year terms of study) where students could study and train after the basic school (9th Grade), technical schools (1-1.5 years) where students could study after the 11th Grade and a few secondary vocational-technical schools (3.5 years) where students could study after basic school and get specialized and secondary education.

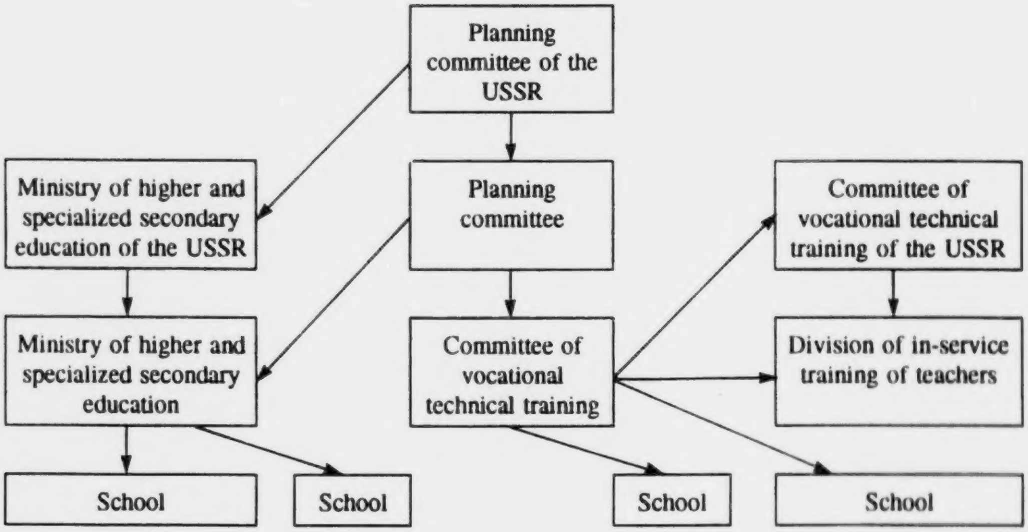
At the end of the 1970s and beginning of the 1980s, it was decided that vocational training schools would be oriented toward preparing highly qualified workers. Technical schools and vocational technical schools were reorganized into secondary vocational-technical schools in which within 3 years, a student acquired both vocational and general secondary education.

Vocational technical schools of various types were reorganized into secondary vocational technical schools in 1984. This type of schools existed until 1991 (See *Figures 1* and *2*).

Figure 1. The former school system

12	Technical school	Universities	Technicums
11 9	Vocational and technical school	Secondary schools	
4	Basic schools 4 years (then 5 years)		
0	Primary school 4 years		

Figure 2. The former system of administration of vocational institutions


Planning committee of the USSR
Ministry of higher and specialized secondary education of the USSR
Planning committee
Committee of vocational technical training of the USSR
Ministry of higher and specialized secondary education
Committee of vocational technical training
Division of in-service training of teachers
School
School
School
School

During the Soviet period vocational schools worked according to unified curricula. The study plan in technical schools assigned 10 per cent of study time to subjects of general education, 20 per cent to specialized subjects and 70 per cent to workshop training and practice in enterprises. The study plans of secondary vocational technical schools assigned 35 per cent of the time to subjects of general education, 57 per cent to vocational training and practice, 12 per cent to specialized subjects and 8 per cent to other subjects.

The planned economy system influenced human resource planning. About 50 per cent of basic-school students were forced to go to vocational training institutions. Graduates from vocational technical schools were compelled to go to predetermined work places. Only 5 per cent of graduates with high results of study were allowed to attend day technicums and high-schools in narrow specialities. Others had to work three years in appointed positions, in which case they had the possibility of studying in the evening or by correspondence with departments of technicums or high-schools.

During the Soviet period, college-level schools were reorganized into technicums. This type of school included polytechnic, building (construction), electromechanical, medical, textile, music, art, agricultural and other schools. The term of study was three-four years after basic school and two-three years after secondary school. They had evening and correspondence departments.

Technicums worked according to the unified curricula of the USSR. The study plans consisted of narrow secondary-school subjects, general technical and specialized subjects, and practice. In the technical-profile technicums 20-30 per cent of the practice term was assigned to practical training to obtain a skilled-worker qualification. Some of the technicum students had practical training in the 'Practice' union (the union of enterprise training workshops for the students' vocational training, where they had a work position and produced real goods) or in enterprises, collective farms and the like. Enterprise representatives took part in the final exams and the course of diploma work.

The technicums were under the supervision of the Ministry of Higher and Specialized Secondary Education until 1988. Since then, the Ministry of Higher and Specialized Secondary Education and the Committee of Vocational Technical Training have been reorganized and the vocational schools and technicums have been transferred under the supervision of the Staff Training Department of The Ministry of Culture and Education.

The main reasons for the reorganization of the VET system in 1990 were the following:

- The VET system was subordinated to political and ideological aims.
- Basic schools were followed by a compulsory appointment to VET institutions, which in turn were followed by compulsory planned recruitment.
- Centralized management did not make it possible to evaluate the nation's social, cultural and economic needs with regard to the VET system.
- Narrow specialities and specializations were not appropriate to the nation's economic, technical, and technological needs.
- VET institutions were illogically distributed throughout nation.

- Unified curricula, and a lack of modern textbooks and of methodological literature.
- A lack of standards as to occupations and educational levels.
- An insufficiency of psychological and pedagogical competence in vocational-training teachers and in the teachers-training system for VET institutions.

2.2 *The education reform in Lithuania*

Educational reform, which was started under the Soviet occupation, can be tentatively divided into four periods:

Phase I (up to 11 March 1990):

- the concept of a national school is presented (end of 1988);
- Lithuanian teachers, scientists, and artists pool their energies in an effort to create new curricula, textbooks and educational materials based on the unique national culture;
- the theoretical foundation of educational reform (types of schools, educational content) and legal documents (laws governing education, school regulations) are drawn up.

Phase II (after the re-establishment of the State of Lithuania on 11 March 1990):

- the administrative structures (The Ministry of Culture and Education, regional departments of education) are reorganized;
- the cutback in vocational schools and colleges is begun;
- changes are implemented in the system of higher education (undergraduate and graduate studies are reorganized, the law on science and studies is passed);
- the law governing education in the Republic of Lithuania is passed, enacting the conceptual regulations of educational reform and creating a legal basis for the restructuring of the educational system.

Phase III (present phase, estimated to continue until 1998):

- a uniform permanent Lithuanian educational system is established; it covers formal and informal education, and an expanded network of public and private educational institutions.
  The education reform programme outlines Phase III activity.

Phase IV (1998-2005):

- the results of reform are assessed and summarized; the structure, curricula and textbooks are revised and expanded.

According to the General Concept of Education, the goals, principles, and structure of the educational system are as follows:

Educational goals:

- to help the individual discover universal human values and base his life upon them;
- to foster a person who is able to think critically, evaluate existential questions, make responsible decisions and operate independently;
- to foster an individual who is prepared for professional work, determined and able to adapt to an ever-changing social and economic environment, and to participate in its improvement;
- to develop the individual's national and cultural consciousness;
- to prepare the person for democracy;
- to raise a citizen of Lithuania.

To achieve these goals a permanent, differentiated and integrated educational system is presently being designed in Lithuania.

Principles of Lithuanian Education:

1. *Humanism:* the affirmation of the absolute value of the individual and his or her freedom and responsibility to choose.

2. *Democracy:* the learning of democratic values and of the ability to base one's life on them; the establishment and application of democratic relations in education; the universal access to education; and the recognition that morality is fundamental to democracy.

3. A commitment to Lithuanian culture and the preservation of identity and historic continuity. Lithuanian education protects and promotes a pluralistic culture enriched by national minorities.

4. *Renewal:* an openness to change and a critical acceptance of novelty, while retaining universal norms of morality and a core of national culture.

Structure of the educational system:

The educational system consists of formal and non-formal educational structures (*Figure 5*).

Formal education is regulated and controlled by the government and ends with examinations and the receipt of a diploma or certificate recognized by the government. The State Education Register defines formal education by spelling out standards of general education, lists of specialities and professions, general requirements for curricula and qualification requirements.

Formal education comprises: (a) the sequential education system, including preschools, general education schools (including youth and special schools), vocational schools, colleges and universities; (b) the non-sequential parts of the educational system, including formal adult education institutions.

Non-formal education comprises self-education, which is based on individual or societal interests and is not defined by the State.

Education is offered in basic schools (ten-year) and secondary (two-year) schools, gymnasiums, youth schools, vocational schools, colleges, universities and special educational schools. Schooling is compulsory through age 16 (included).

The gymnasium offers general education at a more advanced level. It consists of Grades 9 through 12.

Youth schools are the alternative general school for those who for some reason are unable to attend the general schools, who lack motivation or whose attendance is dictated by social conditions. They are "learning by doing" type of schools.

Special-education schools educate children who are unable to attend general education schools because of serious physical or developmental handicaps.

Vocational schools provide vocational training for jobs in various spheres of economic activities at an advanced basic professional-qualification level and offer a general cultural education (three years after Grade 9).

Colleges provide training for jobs in various socioeconomic sectors at an advanced professional qualification level (technicians and supervisory personnel) and offer a general cultural education.

Universities prepare the individual for professional, scientific, or cultural work at the highest qualification level.

At present, the basic school consists of 9 grades, but new types of schools are being developed. Some private schools have been established over the past few years: 11 secondary, 3 vocational, 3 college. A gymnasium and 12 youth schools were also established.

At the beginning of the 1993/94 academic year, the total number of schools amounted to 2,499; 2,317 of them were secondary schools with 510,503 students enrolled; 108 of them were vocational schools 45,392 students enrolled; 60 of them were colleges with 24,444 students and 14 universities with 52,840 students.

The continuation of studies of students graduated from various educational institutions is shown in *Table 15* and in *Figures 4* and *5*.

Table 15. Rate of continuation of studies of pupils and students graduated from various educational institutions (Per cent)

			Continue studies			
	Total graduated	Total	General education school	Vocational school	Colleges	University level
Basic (Grade 10) 1992	100	93.9	55.6	33.8	4.5	
1993	100	93.0	58.5	32.0	2.5	
Secondary (Grade 12) 1992	100	64.5		12.0	20.1	32.4
1993	100	78.1		13.1	25.5	39.5
Vocational 1992	100	0.9		0.3	0.3	0.3
1993	100	0.9		0.3	0.3	0.3
College 1992	100	4.8				4.8
1993	100	6.8		0.04	1.0	5.8

More than half of the graduates from basic schools went on to secondary schools and about one-third to the vocational schools and colleges. Only 4.5 per cent in 1992 and 2.5 per cent in 1994 went straight to college level after the basic schools.

Vocational education

According to the General Concept of Education in Lithuania, vocational education should be the part of the sequential education system that provides an opportunity to receive vocational training for jobs in various spheres of economic activities. It consists of vocational schools and colleges.

The main goals of vocational education are:

- to create an opportunity to receive a vocational and general cultural education meeting today's scientific, technical, and cultural standards as well as the requirements of the selected profession;
- to foster a desire to continuously raise one's qualifications, to be concerned with one's cultural competency, to seek a meaningful and diverse expansion of one's personality.

A reform of the vocational training system needs to be conducted in such a way as to adapt it to the requirements of a market economy. This means that:

- vocational training for very particular professions is to be changed to a more broadly oriented training, including general and vocational education, flexibility and mobility;
- the relations among social partners (the State, the employer and employee) will coordinate in defining the priorities in the various spheres of economic activities, the main goals, and the educational content, in determining the requirements of occupations, and in evaluating qualifications.

1992

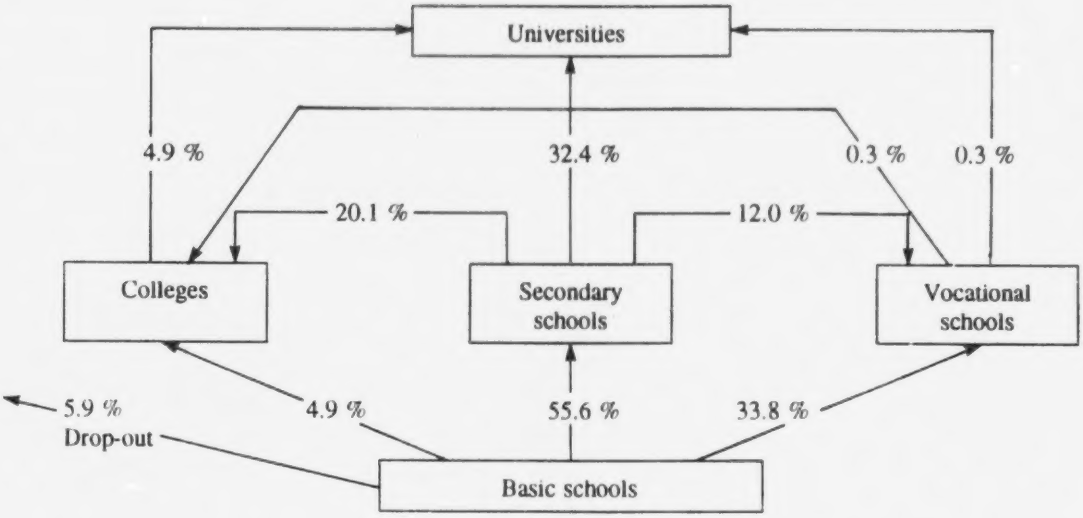


Figure 4

1993

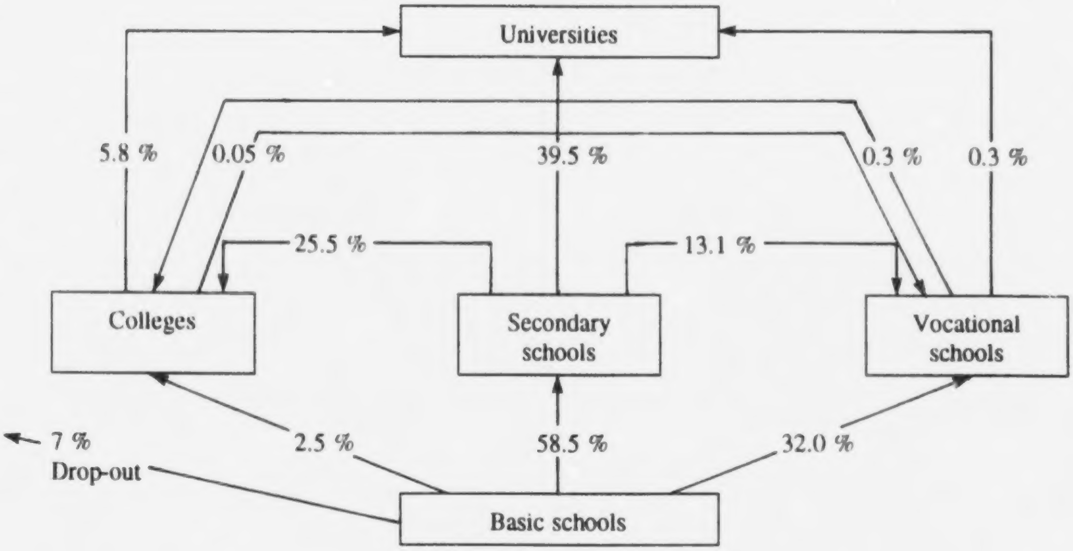


Figure 5

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Vocational schools

The vocational-school system is made up of state-run and private vocational schools of various types and academic levels. State-run schools are under the direction of the Ministry of Culture and Education, or other ministries or departments. In addition to vocational schools that have a formal educational-institution status, corporations and individuals may establish various informal institutions providing vocational training.

Usually students not younger than 16 are accepted by vocational schools. Some schools may make exceptions and accept students as of the age of 15. Vocational schools offer different training programmes of various durations to students of different ages and educational backgrounds. Four different levels of programmes began to be provided in 1992.

1. The main vocational training programme (2-3 years) is a *Level 3* programme accessible to those 16 and over who have finished basic school. Students receive vocational training and the secondary education required in order to apply to comparable schools of higher education. This programme included 31.8 per cent of all vocational-institution students in 1993/1994.

2. Students of the same age and background who do not wish to receive a general education complete only the *Level 2* vocational training programme. This programme included 49.1 per cent of students.

3. Graduates of secondary schools or gymnasiums who desire vocational training can complete a *Level 4* vocational training programme (up to 2 years). This programme included 10.9 per cent of students in 1993/1994.

4. Students who have not finished basic school and are not under 15 years of age may attend 2 – or 3 – year *Level 1* vocational training programmes. Vocational schools offer general education programmes and simplified general education programmes that acquaint the student with the content of his unfinished general education. This programme included 8.2 per cent of students.

From an organizational standpoint vocational schools can offer one, several, or all of the aforementioned programmes.

When this reform concept was developed, general regulations were prepared and approved by the Ministry of Education. The vocational schools began to work with the four levels of programmes. The list of compulsory subjects was elaborated and preparation of the register of occupations began, as well as preparation of the law on vocational training.

Colleges

The goal of a college is to offer a higher (non university) education and create opportunities for students to become competent specialists and good citizens. These specialists are to be able to work independently in economic and social spheres or assist specialists with university degrees.

Colleges can be state-run or private. The Education Register, which is made up of the social partners, regulates the college structure, the description of specialities, the education content, and the duration. The level of education offered by colleges is between that of a secondary school and that of a university. For this reason, the activities of a college are closely linked with those of higher schools, vocational schools, and secondary schools. A college may be associated with a comparable higher school or have an affiliated vocational school.

The length of study in a college is usually two to four years, depending on the requirements of the particular speciality. The education content includes general cultural subjects as well as fundamental (core), professional, and specialized subjects.

Colleges may offer a bachelor-degree programme, the same as that issued by higher schools. The level of general education and vocational training are evaluated by state examination committees, which are chosen among all the social partners.

When this reform concept was developed, general regulations were prepared and approved by the Ministry of Education. The Central Expert Commission for Colleges was established. The list of compulsory subjects was elaborated, the register of specialities was approved and a study curriculum for first-grade students was created. Training courses for the teachers of general subjects were organized. A Council was established to coordinate study and the process of preparing curricula, then the study curricula for colleges for all specialities were approved, as well as New General Regulations. Curricula of basic economic subjects were prepared for the non-economic colleges. In addition, primary-school teacher training was re-established in pedagogical schools.

As we can see, the conceptual background for the reform of the VET system exists; there are many problems, however, in its implementation. The concept and regulations of colleges, and the concept and regulations of vocational schools were confirmed in 1991, but the reform of the VET system was limited to changes consisting in the restructuring of vocational schools and colleges. Many problems of the former vocational system persist:

- the unpredictable economic situation inhibits the development of VET, because the long-term priorities of the economic spheres of activities are not established on the national, urban and regional levels;
- the schools in the different regions are wanting of a clear picture of the specialists and workers needed in their region: although the general regulations were prepared in 1990, the regulations specific to each region have yet to be prepared;

- the transformation process of the VET institutions is very slow because there is still a need to reformulate the status of teachers in the changing economy, which influences the life of the vocational institution;
- lack of modern curricula: there is still no new curriculum for the basic subjects; it is very difficult to develop student-activity-based modern curricula for the vocational schools;
- there are no curricula for the different levels of different specialities;
- lack of standards of occupations;
- lack of modern methodological literature;
- lack of a modern teacher-training system for VET institutions.

All these problems in the present situation have hindered the development of VET reform.

3. Management and financing of the vocational education and training system

3.1 Legal framework of the VET system

The functioning of the entire vocational education and training system is based on the Law on Education, which has only four short, very general sentences referring to vocational schools and colleges. The law stipulates that vocational training of the younger generation in

Lithuania is under the control of the Ministry of Education. There are no legal frameworks for interaction of the vocational education system with local authorities, employers, or trade unions. The lack of a Law on Vocational Training is the most important obstacle in reform and development in this area.

Three projects of this law have been developed, but only the last one will be discussed in the Seimas (Parliament) and will most likely be accepted. The president of Lithuania, Algirdas Brazauskas, in his annual address delivered to the Seimas on 10 February 1994, mentioned that the "training of young people in vocational schools is a subject of great concern because the actions of the various Ministries and agencies in this area are not harmonized. Employers show far too little interest in the training of future workers. Shouldn't they be more implicated in the learning conditions and skills of their future workers, and, of course, allocate more of their funds to prepare future workers? As for the Seimas, it must pass a Law on Professional Education as soon as possible, to regulate the training of specialists and address the issues of training and retraining to meet the needs of the new market-economy conditions...".

If the new Law is accepted, responsibility of vocational education of the younger generation will be distributed among the Ministry of Education, the Ministry of Social Security, and enterprises providing training. Trade unions will play no more than a symbolic role, while local authorities and municipalities will not take part in the vocational education process. State vocational-training institutions will be financed directly by the ministries. The Ministry of Education and Science is currently preparing a project for a Law on Colleges and a Law on Adult Education, which, by optimistic estimates, will be accepted in the second half of 1995. An interaction mechanism between the ministries is lacking; instead, the ministries are competing for areas of influence. As things stand now, vocational schools are under the control of the Ministry of Education and Science and adult retraining courses are under the control of the Ministry of Labour and Social Affairs. The tendency to distribute spheres of influence among the ministries seems dangerous, as this leads to the absence of a very important factor, which is the elaboration of collaborative ideas including all the concerned partners in the field of vocational education.

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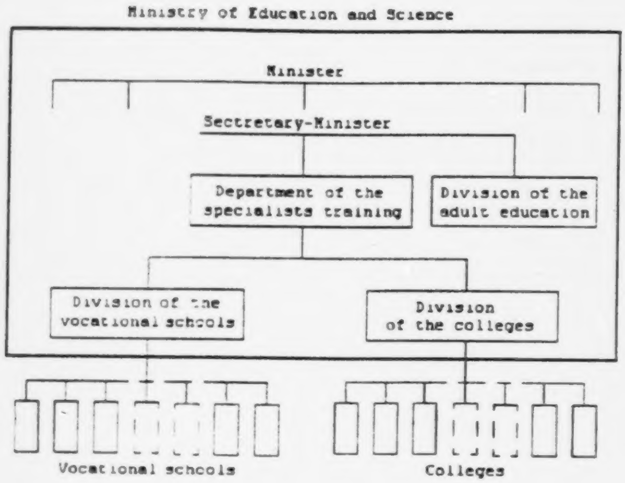
3.2 Management on the VET system

Figure 6. Management of the vocational education and training system


Ministry of Education and Science
Minister
Sectretary-Minister
Department of the specialists training
Division of the adult education
Division of the vocational schools
Division of the colleges
Vocational schools
Colleges

Presently, vocational schools and colleges are under the direct control of the Ministry of Education, mainly on the basis of the Regulations of Vocational Schools and Colleges, approved by the Lithuanian Council of Education.

All matters concerning schools go through the Vocational Schools Division or the Colleges Division, each having a Head and four employees. The Ministry's prerogatives are the nomination of headmasters and principals, the distribution of finances, the approval of the curricula and new specialities, and control of financial, educational, and economic activities in the schools and colleges. According to the headmasters and principals, the local authorities, employers, and trade unions do not have any influence in the life of the vocational education institutions and do not show any interest in having any.

3.3 Internal management of the colleges and vocational schools

According to the Regulations of Vocational Schools and Colleges, the internal management of VET institutions depends on the institutions themselves. Usually the schools have a headmaster, and one or two deputy headmasters – one of them responsible for the teaching and the learning process, the other for economic activities. The most important questions are discussed during teacher meetings; curriculum problems, for instance, are discussed in the method commission, which includes speciality teachers. Only the headmaster,

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however, has any decision-making capacity, and he is responsible for all the activities in the school as well. Colleges operate in the same manner, the only difference being that some of them have three or four vice-principals and a couple of departments with full-time employed heads, or deans. In addition, collective counselling is more active in the colleges through an institution 'directorate', which includes the principal, the vice-principals, the heads of department and the financial officer.

According to the Law of Education, all VET institutions have Boards, which are elected from among teachers, and administrative and technical staff. The Chairman of the Board cannot be the principal and the Boards do not include any representatives from outside the school. As a rule, these Boards are very passive, generally approving the headmasters' or principals' most important decisions. There have only been a few cases where the Boards adopted resolutions that differed with the principal's opinion. The role of the Board is to express the staff's opinion regarding the most important questions. The Board represents the teachers' interests. The result of this sort of internal management, in which employers and local authorities are not represented, is that the resources for improving the quality of teaching and for innovations are very limited.

Although the principals and the headmasters are responsible to the Ministry, the latter does not in fact have enough power, finances, or ideas to establish fruitful or close relations with the schools. Consequently, the entire power of decision and responsibility is concentrated in the hands of the principals and headmasters, who end up having quite a lot of freedom in the area of school development and innovations.

3.4 Financing of the vocational education and training institutions

The schools and colleges in Lithuania are financed exclusively by the Ministry of Education. The volume of the financing depends on the number of the students and the financing of the previous years. Some years ago, schools received substantial material support from enterprises, but this is not the case at present.

Financial resources are allocated to very specific types of expenditure and the schools are required to apply this allocation strictly. The budget provided to vocational colleges by the Ministry of Education in 1993 illustrates a typical distribution of funds among the main items.

Table 16. Financing of colleges by Ministry of Education in 1993

Number of expenditures	Destination of the expenditures	Amount (1,000 litas)	Ratio (Per cent)
1.1	Salaries and wages	7,234	44.55
1.2	Extra charges	2,169	13.36
1.3.3	Heating	1,418	8.73
1.3.4	Electricity	290	1.79
1.3.5	Business trips	28	0.17
1.3.6	Books	23	0.14
1.3.7	Furniture	72	0.44
1.3.10	Other expenses	1,359	8.37
1.3	Total in 1.3	3,159	19.64
3.4.1	Scholarships	3,435	21.15
4.3	Teaching tools and equipment	211	1.30

Source: Ministry of Education and Science.

This amount of financing and the way it is distributed allow schools to survive, and keeps social disturbance at bay. However, it stops short of making any sort of innovations possible, even though the schools are eager to introduce new specialities and curriculum developments. Setting up new workshops and laboratories, for instance, is impossible. Schools and colleges are therefore trying to raise some additional sources of income through methods such as:

- producing goods in the school workshops;
- keeping 50 per cent of the students' wages earned during job training;
- leasing the premises;
- organizing courses;
- offering services.

These are mostly very small-scale activities and do not produce any real change in the financial situation of the school; they do bring in a little extra money to supplement the teachers' salary (a mere 220 litas per month) and the students' scholarships (40 litas). Schools also use this kind of income for the maintenance of the equipment and the workshops, and to purchase material for the workshops.

School headmasters report the following reasons for the limited earning power of their fund-raising activities:

- the produced goods are hard to sell;
- companies do not necessarily pay students on job training;
- the Ministry of Education does not authorize the premises to be leased;
- Labour Agencies do not want to organize retraining courses in the vocational education institutions;
- the teachers are generally passive about organizing additional activities.

4. Teaching and learning conditions in vocational education institutions

In 1993, the World Bank published a report evaluating the Lithuanian vocational education and training system, which describes the following ongoing changes:

- the granting of operational autonomy to individual training institutions;
- the reintroduction on a limited scale of the vocational-training dual system;
- the reduction of overspecialization;
- the conversion of technicums into technical colleges at a post-Grade 12 level.

The report makes a number of general suggestions of measures that need to be taken, including:

- making pre-service training more adaptable to changes in occupational demand;
- measures to enhance upgrading within employment;
- adjustments in the supply of training by discipline;
- cutting back training for disciplines no longer in demand;

the development of a skills strategy for developing, identifying and preparing the best ways to create skills in the priority sectors:

- making follow-up studies routine so that information can be gathered on the performance of graduates in finding relevant employment;
- answering the question as to what kind of agency should be responsible for managing vocational/technical training;
- providing strong financial support, particularly in re-equipping institutions for new occupations;
- considering and carefully evaluating alternative forms of financing such as training, including, in particular, at least partial financing by employers.

The present research intends to provide a more detailed and more specific image of the situation of vocational education.

4.1 Target institutions

As indicated earlier, this study is focused on vocational schools and colleges that have been training skilled workers and technicians for the big industrial enterprises and are particularly concerned by the new economic context. They operate at two levels, vocational schools and colleges, and they are located in two different regions of the country: five of them in the capital, Vilnius, and three in the sixth biggest town, Alytus. This choice will enable us to evaluate a possible influence of different factors in the institutions' environment and surroundings. The institutions also differ in size.

As we shall see, some of these institutions are doing quite well, while others are facing serious problems. The positive experiences could be useful for schools and colleges on the whole. At the same time, it appears that most of the typical problems in vocational education institutions observed can only be solved at the level of government or legislation, at which level the necessary information is not always available.

Table 17. Target institutions

Name of the institution	Number of student in the year 1993/1994	Number of specialities (industrial production + technical services + business and commerce)	Planned new admission (rate of applicants on 1 August 1994)
Vilnius 1st Polytechnic school	500	12 (8+2+2)	425 (-29%)
Vilnius 2nd Polytechnic school	450	7 (5+2+0)	200 (-56%)
Vilnius school of Electronics and Precision Mechanics	250	4 (4+0+0)	50 (-27%)
Alytus Polytechnic school	350	6 (3+3+0)	175 (-54%)
Alytus Textile workers school	400	5 (3+0+3)	175 (-62%)
Vilnius College Electronics	800	4 (1+1+2)	250 (+25%)
Vilnius Technical College	800	7 (7+3+2)	275 (-63%)
Alytus Technical College	670	5 (0+1+4)	175 (+14%)

4.2. Industrial vocational schools – profile descriptions

(a) Vilnius 1st Polytechnic School

The school is located in the very centre of the city, has a good, large building and well-equipped premises and workshops. The headmaster of the school, Mr. K. Voveris, is a chairman of the Lithuanian Headmasters Association. Formerly, the school had the patronage of the big enterprises Venta, Sigma, and others. It was one of the most representative schools in Vilnius. There are approximately 500 students in the 2nd and 4th levels. The number of students has decreased by more than half in the past three years.
Specialities taught:

1. Mechanics of radioelectronic equipment.
2. Operators of microelectronics production lines.
3. Electromechanical tools mechanics and adjusters.
4. Industrial mechanics.
5. Metal turners.
6. Surface-offset printing assembler.
7. Bookbinders.
8. Secretaries.
9. Postal operators.

10. Computer-aided drafting.
11. Electronic and computer equipment assembler.
12. Computerized word processing.

The school's strategy is to introduce the new highly demanded specialities, while maintaining the more traditional, less popular ones. The administration has a lot of trouble finding teachers, as well as supplying them with teaching tools and materials. Only the maintenance of an important machine-tool park requires substantial investment. At the same time, the number of applicants to industrial specialities is decreasing catastrophically. The school is becoming stronger in the fields of publishing and printing specialities. They have found new partners and together with some of the old partners, such as the printer, Viltis, they have started introducing the new specialities for which there is a strong demand in the fast developing publishing industry. The school has an old-fashioned, not very large printing house, but manages to earn real income from its production.

(b) Vilnius 2nd Polytechnic School

School attendance here has plummeted from 800 students some years ago, to a mere 450 today. Before the change, the school was patronized by a large Vilnius welding-machine factory and had good contacts with a number of enterprises, among which Sigma, and an electric meters factory. All of these enterprises are currently finding it very hard to subsist, and have cancelled all support of the school. Formerly, the school was specialized in the field of metal processing. At present, the school is offering the following specialities:

1. Metal processing.
2. Machine-tool operator.
3. Locksmith.
4. Electrical devices assembler.
5. Airplane mechanic .
6. Telecommunications mechanic.
7. Maintenance of domestic electric tools and equipment.

The school has a working relationship with a vocational school from Offenbach-am-Mein, Germany. The teachers visited Germany in a collaboration framework between the Vilnius and Offenbach Chambers of Industry and Commerce. In addition, the school is getting method support in the field of metal processing, and there is a plan to start introducing a dual system of vocational training patterned on German methods.

The school is located in the historical centre of the city in the old palace. In the summer of 1994, the school building was officially registered as one of the National Vilnius Palaces. This has raised some concern in the school administration as to the future of the school: they think that there are many institutions that may have a greater claim to the building than a not very successful vocational school, and do not feel that the Ministry of Education and Science will protect their interests adequately. One interested establishment had a change of mind only after having been shown the large workshops, from which the machine tools can only be extracted by destroying the walls.

The school's main problems are the decreasing number of students, the lack of social partners, and the inadequate financing. The school introduced some new specialities (the last three on the list above), which have met with considerable success among the pupils. Currently, the school has established good contacts with the Lithuanian Airlines company and an agreement for practical training in the Vilnius airport. There is no demand for the old industry-oriented trades. As for extra fund-raising activities, the school produces and delivers small amounts of locksmith tools.

(c) Vilnius School of Electronics and Precise Mechanics

This school was established as part of the electronics enterprise, Vilma, and for many years it trained youngsters for the needs of the enterprise. All the programmes were developed in Moscow, and the classes and training were conducted in the Russian language. The recent changes have brought Vilma to the verge of bankruptcy, and the school is now under the direction of the Lithuanian Ministry of Education. It has developed contacts with Vilma, Sigma, and other factories, but doesn't get any backing from them. The school trains students for the following trades:

1. Radioelectronic apparatus mechanic.
2. Radioelectronic devices assembler.
3. Metal processing machine-tool operator.
4. Mechanical machine assembler and engraver.

The school has 250 students, 6 trainers, and 1 full-time and 11 part-time teachers. It houses 5 classrooms and 5 workshops; 10 groups of students can be taught simultaneously. To preserve a certain flexibility in the teaching content, the school employs teachers on short-term contracts.

(d) Alytus Polytechnic School

The school formerly had the patronage of the Alytus Machinery plant, and good relations with the Alytus Refrigerators plant and Alytus Textile enterprise. The school has a student population of 350 students, plus 20 teachers. According to the headmaster, the school does not need to conduct any follow-up studies, because most teachers know very well what the graduates are doing. This is a typical feature of a small town like Alytus, where the best teachers are perfectly familiar with the fate of their former students.
Trades taught in the school:

1. Joiner.
2. Machine-tool operator.
3. Locksmith.
4. Vehicles mechanic.
5. Domestic tools and equipment mechanic.
6. Automobile-body repairman.

After losing the industry's support the school changed some of its industrial production specialities to more popular trades in the technical services, but the number of applicants has not increased notably. The school operates a small production of bee-keeping tools such as honey extractors, but without any marketing experience and activities, this sort of production is difficult to sell. In former times, with the centralized distribution system, all production was sold to the state, and now the production is accumulating in the store.

(e) Alytus Textile Workers School

The school was established as a labour-force training institution for the giant of the Soviet textile industry, Alytus Textile enterprise, and had good relations with the Lentvaris, Carpets factory and the Kaunas Silkas factory. Currently, the school has 400 students, 14 trainers, and 10 teachers. The school has all four levels of vocational teaching. There are now trained students in following specialities:

1. Weaving production machine operator.
2. Spinning production machine operator.
3. Artistic textile goods production.
4. Salesman.
5. Tailor.

The school introduced new specialities, which have met with success among the pupils. The administration is trying to find new ways to attract youngsters (mostly girls) to the school. The list of the specialities is progressively changing from industrial to trades. Most of the teachers are women with diplomas as industrial engineers or technicians. Now they are trying to make a creative use out of their own experience and skills acquired in everyday life or in hobbies for training in the new specialities. These sorts of innovations do not usually require big financial investments, but they do carry technical and methodological problems, which tend to be solved by the staff without any real support from outside.

The school operates a small production of artistic textile goods, and gets some additional income from factories and companies where the students have training sessions. The school is selling its production through the one of the shops in town. This enables them to buy materials for practical training and production. The school is going to start training cooks, basing the training in the school cafeteria.

4.3 Industrial colleges – profile descriptions

(a) Vilnius college of electronics

The college was established to replace the Electromechanics Technicum in 1991, which trained technicians, technologists and highly skilled workers for the biggest enterprises of the electronics and electromechanics industry in Vilnius. Sigma, Venta, Elfa, and other large enterprises had contracts with the technicum and recruited all their graduates. Most of the curricula were very specialized and production-oriented. Today, the college has approximately 700 students, 70 teachers and is training associate professionals in the fields of:

1. Electronic Devices (production, operating, and maintenance).
2. Computer Technology.
3. Computer Programming.
4. Office Administration.

In 1992, the college joined up with the department of Radiotechnology at Vilnius Technical college and dropped its department of Electrotechnology. In the same year the Office Administration speciality was established. Most of the curricula were changed by the teachers from their production orientation to operation, maintenance and use of the computers, electronics, and office equipment. The college has good relations with the new companies and universities, and is trying to preserve its old ties with the dying enterprises.

The college no longer has any enterprise support. In many cases it has to pay for the students' practical training in companies. The college has many contacts abroad, but not one of them is really useful for teaching and training. It leases its premises to a couple of private computer and electronics companies, which enables it to obtain new computers and provide for their maintenance.

Some of the best teachers, mostly the younger ones, are leaving the college, because people who are experienced with computers, foreign languages, and business are in demand in the private sector of the economy. The salary of a teacher is two or three times lower than in companies for jobs in the same speciality.

For the 1994/95 school year, the college was seeking eleven new teachers in the fields of computer programming, troubleshooting and maintenance, foreign languages, business economy, law, telecommunications; it ran a couple of advertisements in the different newspapers. The salary offered was very low and the only attractions of the job was the possibility of inexpensive lodging as well as that of using the college equipment and premises for private activities. The results of the advertisement were quite interesting: there were many calls (approximately one hundred), but most applicants withdrew after they were informed of the salary. Approximately 30 people were interviewed and 8 people were hired. Interviews with the applicants revealed that most of them had just graduated the previous year, or were retired. The motivation of the younger people was related to the inexpensive lodging for the teachers. The retired people were interested in teaching the basics of foreign languages, law, and economics, but were mostly unwilling to accept teaching modern applied courses. As a rule, the most desirable middle-aged people with some practical experience were jobless or under the threat of losing their job despite their valuable speciality. Some of them were imprisoned or showed some signs of mental disease. Two of the newly employed teachers had conflicts with the students and were dismissed after three weeks of teaching.

(b) Vilnius Technical College

This college was established in 1991 to replace the oldest vocational training institution of Vilnius, the Polytechnic Technicum. It has a long tradition in the training of technicians and highly skilled workers for industry in the fields of production of metal-processing machine tools, vehicle maintenance and operation, and telecommunications. The technicum had close relations with many machine-tool production enterprises. In the past three years, the number of the students decreased from 2,500 to 600 and the number of the teachers from 132 to 84. In 1994, the college admitted students into the following specialities:

1. Electromechanics.
2. Energetics.
3. Electromedical devices.

4. Programme controlling devices.
5. Machine-tool production management.
6. Machine-tool construction.
7. Technological service of the economy.
8. Production and repair of vehicle components.
9. Technical service and maintenance of vehicles.
10. Road freightage.
11. Telecommunications.
12. Postal services organization.

The school's administration is trying to save all the existing practical-training tools, laboratories, and workshops. They are partly changing the contents of the curricula and renaming specialities, while introducing new specialities. According to the principal, the college is trying to survive this economic-recession period on the assumption that the country will need industrial specialists in the future and that making educational specialities more business-oriented may seem a fascinating thing to do, but that losing the industrial-training traditions would be a mistake.

The college's only real support today comes from the telephone company, Telecom, which equipped the new telephone laboratory. The college is taking part in a joint Swedish-Estonian-Latvian-Lithuanian project on vocational education in the field of electromechanics. Sweden offered the college modern laboratory equipment, which it has begun to use for teaching. The principal of the college has good contacts with the French Embassy in Vilnius, thanks to which the college is drawing up an agreement with UGAP, France, in the field of vocational training in metal processing.

Some of the college's teachers visited Austria and Denmark. Two of them, who took a four-month residential course on "International Marketing Systems" in Denmark, left the college just after they returned because they found a more attractive job.

Both teachers and students work servicing cars to earn extra income for themselves and the college. The college intended to lease the premises to private companies but did not get authorization to do so from the Ministry of Education.

The oldest technical school in Vilnius may be surviving, but it is not going through the best of times. It is losing its applicants, its teachers, and its optimism.

(c) Alytus Technical College

This college is the most important educational and intellectual institution in Alytus. It has quite a good working relationship with the town authorities because it represents the town and the entire region of southern Lithuania. In former times, it provided technicians and highly skilled workers to such enterprises as Alytus Textile, the Refrigerator plant, the Machinery plant, and others factories in southern Lithuania. The college has 560 students and 64 teachers, and it is training specialists in the fields of:

1. Business administration.
2. Office administration.
3. Vehicles and motor economics.
4. Motor transport administration.
5. Business in domestic electronics.

In the past three years, the college totally changed its list of specialities from industrial to business. It is also maintaining information contacts with Kaunas Technical University. After the reform in 1991 there was a change in two of the college principals and a substantial proportion of the teachers.

4.4 General trends

The number of students in the industrial colleges and vocational schools began to decrease radically as of 1990, and then entered a period of stabilization in 1993. Most of the colleges are now teaching only graduates from the secondary schools. *Table 18* shows the fall in the total number of students per college, and *Table 19* gives a picture of the new admissions per year in each of the colleges. In both tables, the figures between brackets are the number of students, who were admitted after graduation from the basic 9-years school.

Table 18. Number of college students

College	1990/92	1991/92	1992/93	1993/94
Vilnius Electronics	1072 (770)	1001 (682)	767 (353)	622 (170)
Vilnius Technical	2603 (1135)	1125 (841)	912 (585)	572 (219)
Alytus Technical	785 (759)	637 (542)	596 (384)	561 (116)
Total in Lithuania	29,805 (15,935)	19,295 (9,863)	18,998 (7,915)	17,176 (5,199)

Source: Ministry of Education and Science.

Table 19. New admissions 1990-1994

College	1990/92	1991/92	1992/93	1993/94	1994/95 1 Aug. 94
Vilnius Electronics	289 (180)	119 (-)	222 (-)	242 (-)	250
Vilnius Technical	439 (280)	178 (69)	151 (-)	169 (-)	103
AlytusTechnical	205 (205)	165 (69)	184 (47)	162 (-)	184
Total in Lithuania	8.954 (3.979)	4.966 (1.083)	5.285 (1.211)	5.528 (765)	

Source: Ministry of Education and Science.

Table 20 displays the number of applications for the institutions targeted by our study, as compared to the number of planned students. Vilnius Electronics College and Alytus Technical College are clearly the most in demand. Both of them changed the specialities offered from industrial production to the business and services. Among the vocational schools, only the Alytus School of Polytechnic does not appear to have problems with new admissions, and we can observe that it, too, is introducing specialities in trades. A factor to keep in mind, is that in a region like Alytus, the youngsters do not have a very big choice, as they do, for instance, in Vilnius.

Table 20. Number of applications in the target institutions on 1 August 1994

VET institution	Planned number of students	Applications	Difference
1st Vilnius Polytechnic	425	302	-123 (-29%)
2nd Vilnius Polytechnic	200	111	-89 (-56%)
Vilnius RE&PM	50	23	-27 (-54%)
Alytus Polytechnic	175	170	-5 (-3%)
Alytus Textile	175	66	-109 (-62%)
Vilnius Electronics College	250	313	+63 (+25%)
Vilnius Technical College	275	103	-172 (-63%)
Alytus Technical College	175	200	+25 (+14%)
Total	1.725	1.288	-437 (-25%)

Source: Ministry of Education and Science.

Table 21. Number of applications by specialities on 1 August 1994

VET institution	Planned number of students	Applications	Difference
Vilnius Electronics College	250	313	+63 (+25%)
1. Office administration	75	150	+75* (+100%)
2. Computer programming	50	56	+1 (+2%)
3. Computer hardware	50	77	+27 (+54%)
4. Electronic equipment	75	30	-45 (-60%)
Vilnius Technical College	275	103	-172 (-63%)
1. Electromechanics	50	10	-40 (-80%)
2. Electromedical equipment.	25	8	-17 (-68%)
3. Machine-tool production	50	11	-39 (-78%)
4. Production of vehicles components	50	14	-36 (-72%)
5. Techn. service and maintenance of vehicles	25	25	0 (0%)
6. Road freightage	25	11	-14 (-56%)
7. Telecommunications	50	22	-28 (-56%)
Alytus Technical College	*175*	*200*	*+25 (+14%)*
1. Business administration	50	58	+8 (+16%)
2. Office administration	50	54	+4 (+8%)
3. Vehicles and motor economy	25	59	+34 (+136%)
4. Motor transport administration	25	17	-8 (-32%)
5. Business in domestic electronics	25	12	-13 (-52%)
Total for the 3 institutions	**700**	**616**	**-84 (-12%)**

Source: Ministry of Education and Science.

When we look at the list of specialities in *Table 21*, it is clear that the specialities related to production (such as Electronics Equipment in Vilnius Electronics college and Machine-tools Production in Vilnius Technical college) are not in demand, while the specialities in business are very popular (Office Administration in Vilnius Electronics college, and Business or Office Administration and Vehicles and Motor Economy in Alytus Technical college).

Problems. All target institutions have the same problems, and they are all related to the restructuring of the economy and the ongoing changes in the social and political life. They are solving these problems separately in different ways and getting different results.

The problems mentioned most often during the interviews were related to the limited financing, low salaries, delayed payments, the lack of money for new workshops and equipment, and for other innovations.

Schools and colleges are having considerable problems in the area of curriculum development because of the underqualification of teachers, who, among other deficiencies, do not know enough foreign languages, do not have enough access to information resources, and have not been accustomed to think in terms of innovation. The textbooks and teaching aids are old (10 years and older) and most of them are in Russian, though today's Lithuanian students are not necessarily able to use Russian textbooks. Worse yet, many of the textbooks in Russian are not available, even for the Russian-speaking students.

Schools have not developed contacts with the Labour Agencies, they have no information on the employment situation of their graduates, and no forecasts on labour-market demands at their disposal. The Labour Agencies do not look to vocational schools and colleges as a base for retraining courses for unemployed people.

Employers are cancelling their support of the schools: they are closing down their practice workshops and often demanding that the schools cover the expenses of practical training on company premises, and are not willing to recruit all the graduates as they did in former times.

There was mention of a number of problems related to high-schools: high-schools are competing in the area of vocational training with VET institutions, and furthermore, while it is possible to go from high-schools to university, it is not possible to do so from colleges.

While many teachers are leaving the schools, those that remain are lacking in up-to-date knowledge in modern technologies, computers, business and foreign languages.

Most VET institutions are ignored by local authorities, and not a single institution has any relations with trade unions.

The headmasters interviewed have reported a number of problems with regard to the Ministry of Education: bad coordination of foreign contacts and support; difficulties with the confirmation of teaching plans; difficulties in obtaining authorization for additional activities (leasing of the premises, etc.). All headmasters agree that the Ministry of Education and Science gives the schools and colleges plenty of freedom in searching for ways of surviving, but they are equally unanimous in considering that they are missing support and financing.

4.5 Teachers

The student-to-teacher ratio in the vocational schools under the authority of the Ministry of Education is 13.5:1. In the private colleges, this ratio varies from 2(3):1 (in art colleges) to 18(29):1. The figure between brackets corresponds to the ratio of students to full-time teachers, the other to all teachers.

The student-to-teacher ratio in the colleges targeted in this study, were, for 1993:

1. Vilnius Electronics College	7(18):1
2. Vilnius Technical College	7(13):1
3. Alytus Technical College	9(18):1

Source: Ministry of Education and Science).

By groups of colleges, the ratios are the following:

1. Technical colleges	9(16):1
2. Technological colleges	11(18):1
3. Commercial colleges	9(17):1
4. Nurses colleges	9(18):1
5. Teachers colleges	5(8):1
6. Art colleges	**3(5):1**
Average for Lithuania	7(12):1

The higher figures in the brackets indicate that the school is using a larger number of part-time teachers. Most of the teachers have a higher education in the technical universities, and some of those teaching in the colleges even have doctorate degrees. There is a 42 per cent share of teachers with pedagogical training, and as a rule, these are the ones teaching general subjects. The main problems with regard to teachers, according to the headmasters and the principals, are related to the low remuneration. This makes it impossible to ask professionals to teach part-time, especially in the fields of foreign languages, business, and computers. Teachers who have qualifications in these fields are more likely to be leaving schools in favour of business, where they can earn many times the teaching salary.

Vocational schools are severely wanting in a teachers' education programme. Only the Kaunas Technological University is offering a small number of students a speciality in vocational technical training, but in general none of these go to vocational schools after graduating. Schools and colleges do not face big problems in the teaching of technical and science disciplines: the recession in industrial research has left many highly experienced engineers and researchers out of a job and seeking to be teachers.

4.6. Curriculum development

In the former Soviet Union, all curricula and teaching/training plans were designed in Moscow by central research institutes and were compulsory for all vocational schools and technicums. All curricula were provided with uniform textbooks in Russian and teaching tools. Most textbooks were translated in to Lithuanian, and there was a measure of freedom to adjust the teaching schedule in terms of domestic specificities. Lithuanian pedagogical researchers were allowed to develop part of the curriculum in the area of some of the general subjects.

Today, curriculum development and introduction of new specialities are the business of the vocational schools themselves.

Virtually most of the schools and colleges targeted by this study changed the list of specialities on their programme. The basic content of the teaching was not always changed, but overall, the schools introduced very new curricula. The Ministry of Educations had set limits only as to the proportions between general and specialized subjects, the duration of teaching, and the list of compulsory general subjects. The main shortcoming of this given framework is that the duration of training is the same regardless of the speciality and trade.

What sources of information are the schools using for curriculum development? Mainly, they are turning to examples from other schools and colleges and to curricula in schools abroad, and they are consulting with foreign partners and experts, and employer representatives. Consultants are not part of a formalized structure: their participation depends on the specific conditions of each institution or on the latter's relations with employers. Decisions on the introduction of new specialities or the revamping of a curriculum have always been made by the headmaster or principal after discussions in programme commissions.

As a rule, deputy headmasters, vice-principals, heads of departments and teachers have all taken part in the development of curricula. The programmes of single subjects have always been elaborated by teachers and approved by the local programme commission. These commissions, which are formed by teachers of similar specialities exist in most of the schools. In the case of colleges, some of the curricula and programmes have been approved by corresponding university departments. The final confirmation for the new curricula is given by the Ministry of Education experts commission, which, for vocational schools includes some of the headmasters and more experienced teachers, and for colleges includes the college principals and representatives of the universities. The experience of the institutions targeted in this study shows that the curricula proposed by vocational schools have always been confirmed if they include the proportion of teaching hours recommended by the Ministry. Colleges have had much more trouble with confirmation, because the commission checks not only the quantitative figures but requires an explanation of motivation of the content.

Developing curricula is no easy task for vocational schools and colleges. They have little or no experience in this field, and no adequate methodological support. The persons involved are lacking specific knowledge regarding curriculum development, and they are not given a proper financial reward for their work: in fact, their contribution is usually done voluntarily and without a fee. All the principals and headmasters interviewed believe that they should be able to refer to prototypical curricula developed by professionals for most specialities. This lack of methodological support is currently one of the biggest problems for vocational schools and colleges in Lithuania.

4.7. Practical training

Practical training in vocational schools is based on training in the school workshops and on on-the-job training in the enterprises. The Ministry of Education has required the following proportions for vocational training (general subjects excluded).

Table 22. Volume of vocational-training content recommended by the Ministry of Education in vocational schools (number of hours)

Content	Level I programmes	Level II programmes	Level III programmes	Level IV programmes
Practical training	1,7	2,4	2,2	2,0
Courses in the technologies related to the speciality	59	96	92	39
Courses in the speciality	250-300	250-300	250-300	250-300
	333-383	350	353-403	349-399

Source: Ministry of Education and Science.

On the basis of these recommendations by the Ministry of Education, vocational schools are organizing practical training according to the size of their workshops and the kind of relations they have with the enterprises. Different schools have found different solutions:

- one week of classes + one week in the workshop + a long on-the-job training period;
- one week of classes + a one-week on-the-job session;
- three days of classes + two days in the enterprise + a long on-the-job training period.

The actual organization of practical training differs from school to school and often from one speciality to another. It depends on whether the enterprises provide training.

All the vocational schools in this study hold written agreements with the companies and enterprises concerning practical training. The specific aspect of the current situation is that schools now have a variety of small, medium and large partners instead of one or two big ones, as in the former system.

Most of the enterprises stopped teaching classes and closed down their workshops. Many of the partners do not want to pay for the job done by students during their training period: in fact, some of the companies are even asking to be paid for the students' on-the-job training.

All of the schools and colleges in the research possess rather large and well-equipped workshops and laboratories, but the equipment is generally old and sometimes obsolete; its maintenance and the purchase of materials for the training activities depends entirely on whatever earnings can be obtained through extra activities in production and the leasing of the school premises.

An exception to this rule is in the specialities related to computers, telecommunications, and aeronautic technology, for which schools and colleges have up-to-date equipment thanks to agreements with new partners such as Telecom and Lithuanian Airlines, which are interested in training future employees.

4.8 *International relations*

There are a number of international foreign-support programmes, some of the most important of which are PHARE, TEMPUS, and the Soros Foundation, but none of these to date have been involved with the restructuring of vocational education in Lithuania. In fact, the Lithuanian representatives of the TEMPUS programme are resisting against colleges' participating in this programme. All the coordination of international relations in the field of higher education is controlled by universities. Some Western countries, especially Denmark, Sweden, Germany, Austria, and Canada, are providing a couple of programmes related to vocational training in the fields of business, banking, tourism, nursing, trade, and foreign languages. As a rule, however, foreign partners are choosing pilot trade- and business-oriented private schools, not industrial schools.

All principals and headmasters and a few teachers have visited Germany, Sweden, Denmark, Austria, and France over the last two years. Most of the visits were organized through the Ministry of Education and Culture and paid for by the host country. As in the case of the Vilnius Technical College (see its profile description above), most of the teachers who took part in training courses abroad left their schools after their return, as they were able to obtain much better-paid jobs with the knowledge they acquired abroad in foreign languages, computers and business.

Only the Vilnius Technical College has an ongoing project with the Swedish Also Gymnasium, thanks to which the college acquired the equipment it needed for its electrical engineering laboratory. The rest of the industrial schools and colleges have many foreign visitors who have promised to contribute with methodological and material support, but in the case of the industrial schools, further correspondence has always resulted in the withdrawal of these proposals. All the institutions under study are facing vast problems in this area.

One of most important obstacles to foreign contacts is the language barrier, as most of the headmasters and principals do not speak other languages well enough for communication, and the foreign-language teachers who serve as translators and interpreters have no knowledge in the field of training.

Furthermore, schools and colleges have no experience in joint-project development and implementation. They do not marshal enough activity to make contacts and to keep them. Most of the headmasters and principals are pessimistic as to the foreign support they might obtain in the reform of industrial schools. Only the heads of the Vilnius 2nd Polytechnic school and the Vilnius Technical College are optimistic. The results of the interviews show that the schools and colleges need some external support or special people for establishing and keeping foreign contacts, a procedure that costs money, which for the small schools is always problematic.

4.9 Specifics of the institutions targeted by this study

As we mentioned at the beginning of this report, the targeted institutions were chosen in two different regions and from two different levels – secondary vocational schools and higher-level vocational colleges. The differences between the regions are not very marked. In Alytus, the schools maintain closer relations with their graduates and possess a measure of informal information concerning employment and careers. Relations with social partners are as weak in Vilnius as in Alytus. The only exception is Alytus Technical College, which thanks to its status as the most prestigious intellectual and educational institution in town, draws more attention, but not financing, from the town authorities.

When comparing the schools to the colleges, the differences are more acute. The colleges are more flexible in their adjustments to the new situation and some of them are achieving rapid changes. At the same time, the colleges are branching out in different directions. Alytus Technical College has changed its entire list of specialities to business and services, and Vilnius Electronics College is changing its speciality profiles, and introducing some specialities in business. Only Vilnius Technical College is trying to preserve its older traditions, its former teachers and its workshops, but it does not seem to be doing very well, judging by the only formal indicator of success in these reforms for the time being, which is the number of applications at the beginning of the school year. Generally speaking, the quality of teaching and training in the newly introduced specialities does not appear to be very high. The colleges are lacking textbooks, teaching tools, equipment and qualified teachers. A formal evaluation of the real situation, however, is difficult. The results of the follow-up study and answers to the questionnaires were given by students who graduated in 1993. All of these had studied according to old industry-oriented curricula.

Vocational schools have additional problems with the introduction of new specialities, because of their teachers' lower qualifications and absence of experience in curriculum development. They are therefore only changing the profiles of their specialities, making them broader and more oriented toward services and trades.

5. Employment situation of graduates from industrial vocational institutions

A major indicator of the effectiveness of a vocational-education system is the graduates' situation after they have left the vocational institution: Are they employed? In what kinds of jobs? Are these jobs related to their field and level of training? These questions are of particular importance in the present context of far-reaching changes in Lithuania. To help answer them, some official statistics are available but they are not sufficient to give a comprehensive and realistic picture of the present situation.

For this reason, this study used three simultaneous different approaches to the employment situation:

- a reading of the overall statistical data available from the Labour Agencies;
- a statistical survey based on questionnaires mailed to a sample of graduates;

- interviews with a small sample of enterprises to get their opinions on their relationship with vocational schools and colleges, and on the employment of graduates. These interviews provided some qualitative indications that may be useful in supplementing the quantitative data and in helping to interpret it.

The regions covered by this part of study are the same as that which was analysed in the previous chapters, i.e. the cities of Vilnius and Alytus.

5.1 *Situation of graduates according to official statistics*

The following tables include the information available from the Labour Agencies concerning the situation of graduates in the regions concerned by the study.

Table 23. Employment situation by regions, 1992-93

	Labour force (1,000)		Employed (1,000)		Non employed (1,000)	
Total	1992	1993	1992	1993	1992	1993
Urban	1015.4	1060.7	889.9	872.4	11.1	34.3
Vilnius	332.7	386.8	343.8	345.4	5.3	10.6
Alytus	58.2	54.3	37.7	35.2	0.7	2.6

Source: Statistics Yearbook, Lithuania, 1993.

Table 24. Non-employed seeking a job at the end of the 4th quarter of 1993 and the 2nd quarter of 1994

Educational level	1993 IV	1994 II
Vilnius		
Total	8,699	8,452
High school	1,575	1,399
College	987	924
Vocational schools and courses in enterprises	3,272	2,684
Unskilled	2,865	3,445
Alytus		
Total	1,979	2116
High school	96	98
College	507	446
Vocational school and courses in enterprises	1,277	1402
Unskilled	99	173

Source: Vilnius and Alytus Labour Agencies.

Table 25. Non-employed young people (16-25 years old) registered in the Labour Agencies of Vilnius and Alytus (by quarter of the years 1993-94)

Educational level	1993 I	1993 II	1993 III	1993 IV	1994 I	1994 II
Vilnius colleges	22	92	80	29	10	6
Vilnius vocational school	10	13	36	20	2	17
Vilnius unskilled workers	540	381	867	522	695	503
Alytus colleges	67	40	80	59	84	77
Alytus vocational school	92	117	157	181	236	137
Alytus unskilled workers	111	78	129	142	227	154

Source: Vilnius and Alytus Labour Agencies.

The average non-employment rate was lower in Vilnius (2.7 per cent) than in Alytus (4.8 per cent), as compared to the national rate of non-employment (4.4 percent). The unemployment rate was 1.6 per cent in Vilnius and 1.8 per cent in Alytus (national rate of unemployment, 1.6 percent). Non-employment is higher among workers with vocational school and in-firm training. The non-employed seeking a job in Vilnius are more often unskilled workers than in Alytus, where there are more non-employed skilled than unskilled workers. More graduates and young people are registered in the Labour Agencies in Alytus than in Vilnius. This could be related to the decreased number of job vacancies and the fact that many workers have a part-time job or are on forced leave: in June 1994, 3,976 workers in Vilnius and 1,268 workers in Alytus were on forced leave, and 11,630 workers in Vilnius and 3,676 workers in Alytus were working part-time. The follow-up study was expected to provide more insight into the real situation.

5.2 The follow-up study

As indicated in the previous chapter, this survey covered the same sample of institutions that were selected for interviews in Vilnius and Alytus. A questionnaire was sent in May 1994 to all the June 1993 graduates in industrial specialities from three colleges and five vocational schools. This means that there was an 11-month period during which they were assumed to have looked for a job on the labour market.

The questionnaire included the social characteristics of graduates, the type of studies they followed, the employment situation and earnings, the sector of activity and the type of occupation, and the relationship between the training received and type of job.

Before the survey a pilot test was done with young workers and graduates from Vilnius 2nd Construction Workers' School in Lithuanian and Russian groups. The addresses of the graduates were obtained by the staff of the eight industrial vocational institutions that were part of this survey. The graduates could telephone and get additional information on the survey during the entire period of the survey.

Table 26. Number of graduates to whom the questionnaire was mailed and respondents

VET institution	Number of questionnaires mailed	Number of respondents
1. Vilnius 1st Polytechnic School	233	65 27.8%
2. Vilnius 2nd Polytechnic School	80	28 35.0%
3. Vilnius Radioelectronics and Precision Mechanics School	99	32 32.3%
4. Alytus Polytechnic School	84	37 44.1%
5. Alytus Textile School	142	67 47.2%
6. Vilnius Electronics College	211	94 44.6%
7. Vilnius Technological College	264	89 33.7%
8. Alytus Technological college	124	53 42.7%
Total	1237 *	466 37.7%

* 64 questionnaires were sent to the wrong persons and were returned.

The 1,237 graduates from the sample schools represent 6 per cent of the total number of graduates from vocational institutions in the whole country (11,500 from vocational schools and 9,300 from colleges). The proportion of graduates from colleges is approximately the same in the sample (48 per cent) as in the whole country (44 per cent).

Table 26 shows that 466 replies to the questionnaire were received, which represents a rate of 37.7 per cent if all the questionnaires are taken into account, and nearly 40 per cent after deducing those that were sent to the wrong address.

There may be several reasons for the relatively high proportion of non-respondents:

- there is no tradition for answering mailed questionnaires in Lithuania;
- the rate of reply is definitely lower in Vilnius than in Alytus; this may be related to the fact that Vilnius graduates are of different nationalities and languages (Lithuanian,

Russian, and Polish, mainly), so part of the questionnaires were sent in Russian, but the Russian-speaking population was particularly affected by changes in the economy and has moved frequently during the period between the completion of the school year and the mailing of the questionnaires;

- during this transition period, migrations were particularly frequent;
- as a result of the time constraints of this study, the period available for the survey was very short and the questionnaire had to be sent just before summer vacations.

In addition, the rate of responses was not the same for all the questions, which explains that the total figures may differ as they concern only the responses to specific questions.

In order to get a better picture and attempt to interpret the meaning of the relatively high rate of non-respondents, 50 of them were contacted directly by phone. They gave a variety of explanations for not answering, but on the whole it appeared that the rates of employment and of non-employment were not very different for them than for those who sent back the questionnaires.

In view of these considerations and of the rate of answers received, the results may be considered on the whole as valid. More details on these methodological points are provided in the *Annex*.

5.3 Social characteristics of the respondents

The following tables indicate the distribution of respondents by gender and by level of education. The gender distribution reflects the average among industrial vocational institutions in the country as a whole.

Table 27. Distribution of graduates by sex, region and type of institutions

		Male	Female	Total
Colleges		203	34	237
	Per cent	85.7	14.3	100
Vocational schools		115	112	227
	Per cent	50.7	49.3	100
Vilnius		236	72	308
	Per cent	76.6	23.4	100
Alytus		83	74	157
	Per cent	52.9	47.1	100
Column total		319	146	465
	Per cent	68.6	31.4	100.0

Table 28. Levels of education of the graduates from the two types of institutions

		Vocational schools			Colleges		
	9th form	Higher than 9 th form	Secondary education	Higher than secondary education	Secondary education	Higher than secondary education	Total
Vilnius	6	59	6	50	103	82	306
Alytus	2	95	7	1	51	1	157
Column total	8	154	13	51	154	83	463*

* 3 not answered

This table shows that the difference in educational levels is not so much between vocational schools and colleges, as between Vilnius and Alytus, where the overall level of education reached by the population is clearly lower. This observation is confirmed upon examination of the educational level achieved by the parents (following table).

Table 29. Education level achieved by the graduates' parents

Parents' educational level		Primary school	Basic	Secondary school	Vocational school	Technicum	Higher education	Total
Fathers of college graduates		23	37	36	39	54	44	233
	Per cent	9.9	15.9	15.5	16.7	23.2	18.9	100
Fathers of vocational-school graduates		24	38	47	43	45	15	212
	Per cent	11.3	17.9	22.2	20.3	21.2	7.1	100
Fathers of graduates from Vilnius		22	46	57	56	68	46	295
	Per cent	7.5	15.6	19.3	19.0	23.1	15.6	100
Fathers of graduates from Alytus		25	29	26	26	31	15	150
	Per cent	16.7	19.3	17.3	17.3	20.7	8.7	100
Column sub total		47	75	83	82	99	59	445*
	Per cent	10.6	16.9	18.7	18.4	22.2	13.3	100.0
Mothers of college graduates		15	26	44	22	83	45	235
	Per cent	6.4	11.1	18.7	9.4	35.3	19.1	100
Mothers of vocational-school graduates		19	37	59	26	63	20	224
	Per cent	8.5	16.5	26.3	11.6	28.1	8.9	100
Mothers of graduates from Vilnius		17	37	68	27	103	52	304
	Per cent	5.6	12.2	22.4	8.9	33.9	17.1	100
Mothers of graduates from Alytus		17	26	35	21	43	13	155
	Per cent	11.0	16.8	22.6	13.5	27.7	8.4	100
Column sub total		34	63	103	48	146	65	59*
	Per cent	7.4	13.7	22.4	10.5	31.8	14.2	100.0

* no answers for those who have no parents.

5.4 *Present employment situation of graduates*

The questionnaire revealed that 62 per cent of the graduates who completed their studies in vocational institutions in 1993 had a permanent job at the time of the survey, out of which 9.5 per cent worked only part-time. If we refer to the official definition of employment, which also includes students and those serving in the army, we can say that 70 per cent of the graduates who responded to the questionnaire were employed. The overall unemployment rate among them is nearly 20 per cent, and it goes up to 30 per cent if the number of people who have only occasional jobs is also computed.

The unemployment rate appears to be much higher in Alytus (33.3 per cent) than in Vilnius (12.7 per cent); furthermore, 41.6 per cent of graduates from Alytus and 24.4 per cent from Vilnius who answered the questionnaire had no permanent job. This reflects the difference in the economic situation of the two cities: Alytus was the location of many large industrial state enterprises, which are also those that suffered the most from the recession, to the effect that employment was reduced and recruitment was stopped.

Another significant difference can be observed between college graduates and vocational-school graduates, the latter of which have a much higher unemployment rate. This illustrates the fact that there is less demand for lower qualifications in the new market economy.

Table 30. Employment situation of graduates, by type of institution and by region

		Have permanent work						
		Full-time work	Part-time work	Occasional work	Unemployed	In the army	Studying exclusively	Total
College		130	24	21	30	9	20	234
	Per cent	55.6	10.3	9.0	12.8	3.8	8.5	100
Vocational school		113	20	28	61	1	6	229
	Per cent	49.3	8.7	12.2	26.6	0.4	2.6	100
Vilnius		173	32	36	39	9	18	307
	Per cent	56.4	10.4	11.7	12.7	2.9	5.9	100
Alytus		70	12	13	52	1	8	156
	Per cent	44.9	7.7	8.3	33.3	0.6	5.1	100
Column total		243	44	49	91	10	26	463*
	Per cent	52.5	9.5	10.6	19.7	2.2	5.6	100.0

* no answers for 3.

It turns out that this data is not consistent with that provided by the National Labour Agency and the Alytus and Vilnius Labour Agencies because only part of the graduates have registered in the Labour Agencies. The data of our study furnishes a graduate unemployment rate of 21.3 per cent and a non-employment rate of 32.8 per cent, which is higher than the official statistics. A number of graduates do not seek a job through Labour Agencies, one of the reasons being the small amount of unemployment benefits provided by the agencies during the search period.

As we can note in the following table, unemployment rates also differ according to the field of study.

Table 31. Employment situation of graduates by field of study

		Have permanent work						
		Full-time work	Part-time work	Occasional work	Unemployed	In the army	Studying exclusively	Total
Textile		26	8	2	26		1	63
	Per cent	41.3	12.7	3.2	41.3		1.6	100
Communication		13	3	2	2	1	2	23
	Per cent	56.5	13.0	8.7	8.7	4.3	8.7	100
Electronics		87	17	14	16	3	10	147
	Per cent	59.2	11.6	9.5	10.9	2.0	6.8	100
Electricity		35	4	9	11	4	4	67
	Per cent	52.2	6.0	13.4	16.4	6.0	6.0	100
Machine industry		82	12	22	36	2	9	163
	Per cent	50.3	7.4	13.5	22.1	1.2	5.5	100
Column total		243	44	49	91	10	26	463*
	Per cent	52.5	9.5	10.6	19.7	2.2	5.6	100.0

* no answers for 3.

Graduates in textile occupations are five times more unemployed than graduates in communication, and approximately four times more than graduates in electronics. Most graduates in electronics have a full-time job. This data is therefore similar to the official structure of non-employment by spheres of economic activities.

Table 32. Employment situation of graduates by gender

		Have permanent work						
		Full-time work	Part-time work	Occasional work	Unemployed	In the army	Studying exclusively	Total
Male		171	32	42	43	10	21	319
	Per cent	53.6	10.0	13.2	13.5	3.1	6.6	100
Female		73	12	7	48		5	145
	Per cent	50.3	8.3	4.8	33.1	0	3.4	100
Column total		244	44	49	91	10	26	464*
	Per cent	52.6	9.5	10.6	19.7	2.2	5.6	100.0

* no answers for 2.

There are three times more female than male graduates who are unemployed, but there are more men who only have occasional, not permanent work. This might be explained by the fact that more young men prefer to take occasional or non-official jobs rather than commit themselves to the very low salaries offered by enterprises.

Table 33. Earnings of graduates, by vocational institutions and by region

		Don't get any social benefit	Get a social benefit	Get under 100 Lt	Get under 300 Lt	Get under 500 Lt	Get more than 500 Lt	Total
College		31	8	35	96	39	25	234
	Per cent	13.2	3.4	15.0	41.0	16.7	10.7	100
Vocational school		55	9	48	90	18	8	228
	Per cent	24.1	3.9	21.1	39.5	7.9	3.6	100
Vilnius		42	8	51	126	49	31	297
	Per cent	13.7	2.6	16.6	41.0	16.0	6.8	100
Alytus		44	9	32	60	8	2	155
	Per cent	28.4	5.8	20.6	38.7	5.2	1.2	100
Column total		86	17	83	186	57	33	462
	Per cent	18.6	3.7	18.0	40.3	12.3	7.2	100

The data shows that 40.3 per cent of graduates earn less than 300 Lt per month, with 18.0 per cent of them earning under 100 Lt. During the period of our survey, non-employed graduates with no income amounted to 18.6 per cent, while 3.7 per cent were getting unemployment benefits. In Alytus, there were more graduates with no income than in Vilnius. Moreover, graduates from Vilnius had higher earnings than the graduates from Alytus, which is mostly explained by the development of the private sector in Vilnius.

College graduates had higher earnings than vocational-school graduates. College graduates not only have a higher qualification and access to better jobs, they may also be more likely to seek a job actively.

Under the former regime, graduates were officially placed by the planning authorities. The survey shows that the most important factor in the new context is personal contacts: 40.6 per cent of the graduates found a job with the help of parents, relatives or acquaintances. Vilnius graduates resorted to this method more often (47.4 per cent) than Alytus graduates (27.4 per cent). Similarly, it was used more often by college graduates than by vocational-school graduates.

Table 34. Job-hunting strategies, by type of institution and by region

		Vocational institutions	Practical training in enterprises	Labour Agency	Advertisement	Parents relatives, acquaintances	Themself	Other	Total
College		2	10	10	11	116	43	44	236
	Per cent	0.8	4.2	4.2	4.7	49.2	18.2	18.7	100
Vocational school		22	28	14	8	73	39	45	229
	Per cent	9.6	12.2	6.1	3.5	31.9	17.0	19.7	100
Vilnius		4	25	12	14	146	57	50	308
	Per cent	1.4	8.1	3.9	4.5	47.4	18.5	16.2	100
Alytus		20	13	12	5	43	24	39	157
	Per cent	12.8	8.3	7.6	3.2	27.4	15.9	24.8	100
Colum total		24	38	24	19	189	82	89	465*
	Per cent	5.2	8.2	5.2	4.1	40.6	17.6	19.1	100.0

* no answer for 1.

This data confirms the findings of a recent survey by R. Alisauskiene and B. Sersniova (1993), according to which students from vocational schools and colleges were oriented with the help of parents, relatives, acquaintances and had little information about the structure of the labour market.

The study also indicates differences between Vilnius and Alytus as to the role of vocational institutions in helping their graduates find a job: this role appears to be much more important in Alytus, where there was a longstanding tradition of close cooperation with the large enterprises. Graduates from vocational schools frequently begin to work in enterprises where they have had practical training in the course of their studies.

As to the time required to find a job after graduation, the survey did not reveal any significant difference associated to the type of school, the location, the age or the gender. The corresponding table can be seen in *Appendix 4*.

Table 35. Graduates who are pursuing their studies

		Public course	Private course	Evening secondary school	Adult training and vocational school	College and higher school	Other	Total
College		4	11	0	3	33	5	56
	Per cent	7.1	19.6		5.4	58.9	8.9	100
Vocational school		11	7	7	13	5	7	50
	Per cent	22.0	14.0	14.0	26.0	10.0	14.0	100
Vilnius		13	14	5	9	26	7	74
	Per cent	17.6	18.9	6.8	12.2	35.1	9.5	100
Alytus		2	4	2	7	12	5	32
	Per cent	6.3	12.5	6.3	21.9	37.5	15.6	100
Male		10	16	6	4	34	8	78
	Per cent	12.8	20.5	7.7	5.1	43.6	10.3	100
Female		5	2	1	12	4	4	28
	Per cent	17.9	7.1	3.6	42.9	14.3	14.3	100
Column total		15	18	7	16	38	12	106
	Per cent	14.2	17.0	6.6	15.1	35.8	11.3	100.0

According to this table, 22.7 per cent (106) of all the graduates who responded to the questionnaire were continuing their studies at the time of the survey. This figure is higher than the one given in Table 5.8 for the present situation of graduates (5.6 per cent), because many of them (17 per cent) were studying at the same time as they were involved in another type of activity, and studying was not their exclusive occupation. Among those who were studying, many of them were attending colleges or high schools (35.8 per cent); 17.0 per cent were attending private courses.

This data confirms a survey by R. Alisauskiene (1993), according to which one of the ways unemployment is dealt with is to change speciality or to requalify: part of the graduates who were studying were doing so at the same level, but in a different speciality. Another, non negligible factor is that they were thus able to apply for a scholarship. College graduates studied in private courses more frequently than vocational-school graduates, who preferred public courses. More male graduates attended private courses, colleges and high schools than female graduates, more of whom attended vocational schools and adult vocational training centres.

Table 36. Reasons given by graduates for pursuing their studies, by type of institution and by region

		Improve their qualification	Cannot find a job	Want to train in another speciality	Other	Total
College		14	6	23	13	56
	Per cent	25.0	10.7	41.1	23.2	100
Vocational school		5	14	18	4	41
	Per cent	12.2	34.1	43.9	9.8	100
Vilnius		17	12	30	11	70
	Per cent	24.3	17.1	42.9	15.7	100
Alytus		2	8	11	6	27
	Per cent	7.4	29.6	40.7	22.2	100
Column total		19	20	41	17	97*
	Per cent	19.6	20.6	42.3	17.5	100.0

* no answer for 9.

This table shows the different reasons that motivated graduates to continue their studies. Those who want to improve their qualifications may already have already a job, while it is possible that those who want to train in another speciality are doing so because they were not able to find a job, a situation which is not very different from the group in the second column, who declare to be studying because they cannot find a job.

5.5 Characteristics of the jobs held by the graduates who are employed

The following table gives information on the sectors of activity in which graduates found employment, for those who did.

This table provides some interesting findings. Although the graduates all come from industrial vocational institutions, only approximately one third of them actually work in the manufacturing sector. To some extent, this is normal, because industrial qualifications are also required in other sectors, which is probably even truer in the present context, in which many manufacturing companies are collapsing while new sectors are developing.

Graduates from Alytus are concentrated in the manufacturing sectors, while in Vilnius they are spread over a variety of sectors, which is related to the above remark, as there is less development of new activities in Alytus.

The diversity of sectors is far more important among college graduates than among vocational-school graduates: the majority of the latter are still recruited by manufacturing enterprises. There is quite a significant recruitment of college graduates in the service sector (which may include jobs in the police force, for instance).

Table 37. Economic-activity sectors in which the employed graduates are working, by type of institutions, by region, and by occupational group

		Commerce	Manufacturing	Construction	Whole-sale and retail commerce	Agriculture	Communication, transport	Social and other services	Total
College		24	32	22	35	1	22	37	175
	Per cent	14.9	18.2	12.6	20.0	0.6	12.6	21.1	100
Vocational school		12	182	22	17	4	8	10	155
	Per cent	7.7	52.9	14.2	11.0	2.6	5.2	6.5	100
Vilnius		29	60	35	42	1	29	41	237
	Per cent	12.2	25.3	14.8	17.7	0.4	12.2	17.3	100
Alytus		9	54	9	10	4	1	6	93
	Per cent	9.7	58.1	9.7	10.8	4.3	1.1	6.5	100
Textile		3	24	1	3	3	0	5	39
	Per cent	7.7	61.5	2.6	7.7	7.7		12.8	100
Communication		2	3	1	6	0	6	0	18
	Per cent	11.1	16.7	5.6	33.3		33.3		100
Electronics		14	31	14	17	0	11	28	115
	Per cent	12.2	27.0	12.2	14.8		9.6	24.3	100
Energy supply		6	9	10	9	1	8	6	49
	Per cent	12.2	18.4	20.4	18.4	2.0	16.3	12.2	100
Machine industry		13	47	18	17	1	5	8	109
	Per cent	11.9	43.1	16.5	15.6	0.9	4.6	7.3	100
Column total		38	114	44	52	5	30	47	330
	Per cent	11.5	34.5	13.3	15.8	1.5	9.1	14.2	100

Graduates who were trained in the textile and machine industry are still being recruited mostly by manufacturing firms. (It should be noted that these are also the groups of occupations in which the rate of unemployment is particularly high.) A distribution along a wider range of sectors can be observed for other graduates, especially in electronics, who are often recruited in the service sector.

The next table gives information on the size and status (public and private) of the employers. As private firms are comparatively small, size frameworks are not the same for public and private enterprises.

When comparing public to private firms, it appears that the distribution of vocational-institution graduates is not very different from the overall employment distribution (approximately 50 per cent in each of the two sectors, private and public). This might seem rather paradoxical at first, considering that public firms are in a period of recession while private firms are developing. The explanation can probably be found in the opinions expressed by enterprise managers during the interviews: in the private firms, they do not seem to be interested in recruiting young graduates with no experience.

Table 38. Types of enterprises where graduates work, by type of institution, by region and by gender

		Public enterprises, with - 1,000 employees	Public enterprises, with 1,000+ employees	Private enterprises, with - 50 employees	Private enterprises, with 50+ employees	Agriculture	Total
College		70	25	59	14	5	173
	Per cent	40.5	14.5	34.1	8.1	2.9	100
Vocational		41	45	46	20	2	154
	Per cent	26.6	29.2	29.9	13.0	1.3	100
Vilinius		90	38	80	22	5	235
	Per cent	38.3	16.2	34.0	9.4	2.1	100
Alytus		21	32	25	12	2	92
	Per cent	22.8	34.8	27.2	13.0	2.2	100
Column sub total		111	70	105	34	7	327*
	Per cent	33.8	21.3	32.1	10.4	2.1	100
Male		84	38	85	20	7	234
	Per cent	35.9	16.2	36.3	8.5	3.0	100
Female		27	32	21	14	0	94
	Per cent	28.7	34.0	22.3	14.9		100
Column sub total		111	70	106	34	7	328**
	Per cent	33.8	21.3	32.3	10.3	2.1	100

no answer for * 2 and * *3.

When considering the size, if we put together the data on large public firms and the larger private ones, we can see that:

- college graduates are recruited more often by smaller public and private enterprises;
- graduates from Vilnius work more often in smaller firms than those from Alytus, where there has been less development of this type of firm and where the larger industrial enterprises are still predominant; and
- female graduates seem to be recruited more often by the larger firms than male graduates.

The following table provides additional information about the graduates employed in the private sector who work either in a family business or who have established their own business. Although the figures are small, they show quite significant results.

Table 39. Employment in family business and personal business

		Enterprises established by parents, relatives, acquaintances	Established by graduates	Other	Total
College		29	16	120	165
	Per cent	17.6	9.7	72.7	100
Vocational school		20	1	113	134
	Per cent	14.9	0.7	84.3	100
Vilnius		41	15	163	219
	Per cent	18.7	6.8	74.4	100
Alytus		8	2	70	80
	Per cent	10.0	2.5	87.5	100
Column total		49	17	233	299
	Per cent	16.4	5.7	77.9	100

Employment in a family or personal business is more common in Vilnius than in Alytus and among college graduates than among those educated in vocational schools.

The next table reviews the distribution of employed graduates among job-skill levels.

Table 40. Qualification level of jobs occupied by graduates, by type of institution, by speciality and by region

		Unskilled worker	Skilled worker	Technician	Supervisor	Total
College		37	92	35	6	170
	Per cent	21.8	54.1	20.6	3.6	100
Vocational school		49	103	0	2	154
	Per cent	31.8	66.9		1.3	100
Vilnius		63	128	33	8	232
	Per cent	27.2	55.2	14.2	3.4	100
Alytus		23	67	2	0	92
	Per cent	25.0	72.8	2.2		100
Textile		11	28	0	0	39
	Per cent	28.2	71.8			100
Communication		5	12	0	1	18
	Per cent	27.8	66.7		5.6	100
Electronics		23	62	21	4	110
	Per cent	20.9	56.4	19.1	3.6	100
Energy supply		15	24	6	3	48
	Per cent	31.3	50.0	12.5	6.3	100
Machine industry		32	69	8	0	109
	Per cent	29.4	63.3	7.3		100
Column total		86	195	35	8	324*
	Per cent	26.5	60.2	10.8	2.5	100

* no answer for 6

The results emphasize that quite a large number of graduates are employed as unskilled workers only, which means that their diploma is not taken into consideration. It would be interesting to know whether this is a new phenomenon, related to the growing level of unemployment (so that graduates are forced to accept a job under any condition, and employers take advantage of the situation), or whether it has to do with the type of job, especially in the 'shadow economy'. There is no data available, however, to clear up this point.

As might have been expected, the situation is more satisfactory for college graduates, but nearly 22 per cent of them are still considered as unskilled, while only 21 per cent are employed as technicians. Initially, college graduates were supposed to work as technicians, but for some time already, many of them have been recruited as skilled workers.

The proportion of unskilled workers does not vary significantly among fields of study; only graduates in electronics have a better situation, with, in particular, a higher proportion of technicians.

Table 41. Relationship between field of study and type of work, by type of institution, by region, and by occupational group

		Work related to speciality	Work partly related to speciality	Work not related to speciality	Total
College		28	68	78	174
	Per cent	16.1	39.1	44.8	100
Vocational school		45	22	87	154
	Per cent	29.2	14.3	52.7	100
Vilnius		43	73	120	236
	Per cent	18.2	30.9	50.8	100
Alytus		30	17	45	92
	Per cent	32.6	18.5	48.9	100
Textile		12	4	23	39
	Per cent	30.8	10.3	59.0	100
Communication		6	2	10	18
	Per cent	33.3	11.1	55.6	100
Electronics		16	45	53	114
	Per cent	14.0	39.5	46.5	100
Energy supply		14	12	22	48
	Per cent	29.2	25.0	45.8	100
Machine industry		25	27	57	109
	Per cent	22.9	24.8	52.3	100
Column total		73	90	165	328*
	Per cent	22.3	27.4	50.3	100

* no answer for 2

The main finding from this table is the high proportion of graduates whose work is not at all related (50 per cent), or only partly related (27 per cent) to their field of study: overall, only 22 per cent of employed graduates are working in an occupation for which they have been trained. This is even more marked for colleges than for vocational schools. One has to be careful in the interpretation of this data and not draw hasty and negative conclusions, since all the other information indicates that college graduates seem to do better. Similarly, it is also interesting to observe that graduates in electronics are those who work the least in their field of specialization, which is consistent with the findings from the other tables.

Table 42. Rate of job-changes since graduation, by type of vocational institution and by region

		First job	Second job	Changed jobs more than twice	Total
College		127	34	11	172
	Per cent	73.8	19.8	6.4	100
Vocational school		118	28	9	155
	Per cent	76.1	18.1	5.8	100
Vilnius		166	50	18	234
	Per cent	70.9	21.4	7.7	100
Alytus		79	12	2	93
	Per cent	84.9	12.9	2.2	100
Column total		245	62	20	327*
	Per cent	74.9	19.0	6.1	100

* no answer for 3.

This table indicates that about 25 per cent of the employed graduates have changed jobs at least once since their graduation. This is a rather high rate of mobility, but it is particularly high in Vilnius, which is explained by the particular situation of the labour market in the capital, where the frequent establishment of new enterprises opens up a larger range of job opportunities encouraging, or at least facilitating mobility.

6. Relations between enterprises and vocational institutions (Based on interviews with enterprise managers)

Managers were interviewed in five enterprises: the joint Lithuanian and German company EMH-ELGAMA (Vilnius); the joint-stock company Alytus Textile (Alytus); the public enterprise Venta (Vilnius); the public enterprise Vilma (Vilnius); the Public Marketing Enterprise (Alytus). These enterprises are profiled in he following table.

The interview with the manager of EMH-ELGAMA revealed that the main problems this new enterprise is facing are related to the production itself (electronic multi-tariff electricity meters) because production is expensive. The enterprise has no problems getting highly qualified specialists. They can recruit them among professionally competent higher-school graduates. The enterprise's main criteria for choosing employees are: recommendation, professional competence and sociability, and individual psychological personality features. The enterprise has no relations with vocational institutions. Only one high-school graduate had practical training and acquired the competence for his diploma work. Two persons have left the enterprise since it was first set up, for reasons related to their personality features.

Table 43. General information on enterprises

Name of enterprise	Sector of economy	Sphere of economic activity	Number of employees	Kind of production
EMH-ELGAMA	Private	Electronics	20	Electronics multitariff electricity meters
Alytus textile	Private	Textile industry	5.014	Dress and bedclothes material
Vilma	Public	Radio-electronics	1.503	Tape recorders
Venta	Public	Electronics	1,700	Integrated circuits and other
Public Marketing Enterprise	Public	Commerce, woodwork	137	Doors, windows

The enterprise is not interested in cooperating with vocational institutions because the labour market is full of highly qualified specialists.

The same is true for Public Marketing Enterprise in Alytus. This enterprise was established after the Experimental Company of House Construction was dismantled. Public Marketing Enterprise is one of the twelve enterprises that it comprised[1]. The interview with the manager of this enterprise shows that it has had no relations with vocational institutions since the Experimental Company of House Construction broke down. Only four students from Alytus Technical college have had practical training in this enterprise. There is no likelihood that the enterprise will recruit graduates from vocational institutions because it has enough experienced employees.

As a result, vocational-institution graduates have little possibility for doing some practical training or getting hired in newly established enterprises or firms, irrespective of their public or private status, because the labour market is full of specialists with a high professional competence; new firms are not large and the work in them is intensive, so the employees have no working space or time to train graduates; a formal commitment to accept students and graduates for practical training or for employment does not exist in all enterprises.

A quite a different situation exists in the other three other well established enterprises, where they have longstanding traditions of cooperation with vocational institutions, through personal mutual agreement between the enterprise staff and vocational institutions.

The bankruptcy of the public enterprise, Vilma, was announced at the beginning of the year, after which a programme to recover from bankruptcy was elaborated. The main problems were to pay debts, to recover competent specialists, and to find investors. Many employees left the enterprise in 1993-94. Eight technicians and engineers were laid off and

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1. The same situation exists in the new Public Enterprise of Marketing in Alytus. (It is one example of many new firms where different spheres of economic activity are combined (commerce and woodwork in this case) and the name does not reflect the sphere of economic activity.

one was recruited in 1994. The enterprise has oriented its search toward qualified workers, but not toward specialists from colleges, because of its traditional cooperation agreement with Radioelectronics and Precision Mechanics School, with which the administration of Vilma has signed contracts every year. According to these contracts, the enterprise supplies the vocational school with equipment, organizes the workshops, takes students in for practice and employs graduates. About 4-5 specialists from the enterprise work in the vocational school as teachers, and the teachers of the vocational school have stable relations with the enterprise supervisors. The curricula of the vocational school are confirmed by the administration of the enterprise, and the enterprise staff has the possibility of initiating and influencing the establishment of new specialities and specializations. Students go to the enterprise for practical training after a half a year of training in the school workshop. The students acquire the speciality and a specialization or general and complementary specialities. Thus, about 50-80 per cent of the graduates from Radioelectronic and Precision Mechanic School go to work at Vilma. The administration of the enterprise often prefers young workers to experienced ones because they can work with new equipment and technology. The other side of the picture is that, according to the interview with the Labour Agency, the graduates from this vocational school do not have a broad vocational education and if they leave the enterprise, they have trouble getting a job.

The interview with the manager of the joint-stock company, Alytus Textile, indicates that the main criterion for recruitment is professional competence. Company development depends on new production and new technologies. The enterprise's main problems are financial, technological, and production-related. It recruited 42 young workers in 1993 and 10 young workers in 1994. They had finished Textile School and worked as spinners and carders. Specialists and supervisors who were college and higher-school graduates were not recruited: the company trained specialists and supervisors from among its employees. Alytus Textile had traditional relations with the Textile School because it was the company's basic school where the workshop for students' practical training workshop was, despite that Alytus Textile has become a private firm and all the Textile School teachers came from the company. The vocational school's curriculum was coordinated with the company, and curriculum changes were made in terms of new equipment and technology. Students from the Textile School get practice training in the company. Four students were sent to corresponding high schools and colleges and their studies were paid for in 1993-94. At present, the economic situation of the enterprise is difficult and this is the main reason that the number of graduates recruited to work in the company has been steadily declining over the past four years (1991: 118 graduates; 1992: 104 graduates; 1993: 53 graduates; 1994: 10 graduates). The company is currently planning to dismiss about 365 employees and 560 employees are on forced leave.

The interview with the manager of the public enterprise, Venta, shows that the main problems this enterprise is facing have to do with production and finance, which has led the enterprise to plan a partial change in sphere of activity. The main recruitment criteria are the level of educational and professional competence. The enterprise recruited 184 employees in 1993 and 26 employees in 1994, part of whom were skilled workers (metal workers, integrated-circuit assemblers). The enterprise prefers workers who have finished college or technical school: 32 college graduates began work in the enterprise in 1993 and 2 college graduates in 1994. It has not recruited any technicians in the last two years – the engineers usually work as technicians. The enterprise has relations with the Electronics College and the 1st Polytechnic school. About 3-4 specialists from the enterprise work in vocational institutions as teachers, but they have no significant influence on the changes in curriculum. Presently, the students from this institution come to the enterprise for practical training on the condition that they work in the enterprise after graduating. Many young workers are leaving the enterprise because they have not received their pay for a few months and the enterprise has cut down the staff.

An analysis of the interviews shows that:

- the persons who have finished college work more often as skilled workers than as technicians;
- the new enterprises have no need to establish relations with VET institutions because the labour market is full of highly qualified specialists;
- the old big enterprises and companies have traditional relations with basic vocational institutions but they are facing many problems in production, financing, and technology, so practical training of the students and their recruitment in the enterprises has declined and graduates are having more trouble finding a job. The recruitment and practical training of graduates depends on the enterprise policy;
- a formal commitment to recruit graduates does not exist, so it is necessary to elaborate, as soon as possible, some documents that would describe the relations among the enterprises, vocational institutions, and the students; such a project is in progress as the Law on Vocational Training.

Conclusion

There seems to be a tendency, in Lithuania's economy, to industrial recession and a fast development of new branches in the fields of services and small – and medium-sized business such as trade and commerce, tourism, and banking. Most of the developments are closely linked to the private sector of the economy. This economic restructuring calls for a genuine reform in the training system of the labour force as well as in the entire educational system.

The Lithuanian vocational education and training system is going through a crisis, which is the most severe in industrial vocational schools and colleges. The only way out of this crisis will be through considerable investments after the elaboration of a programme of reform.

Lithuania is lacking a reform strategy for vocational education and training, as well as research projects, and even the research institutes that could develop a strategy for managing the vocational education and training system. The country is also wanting in a legal framework for vocational education and training and adult education.

The present research concerns only a sample of vocational education and training institutions and covers two different periods of time: first, a follow-up study conducted in March-July 1994 of 1993 graduates, who had studied from 1989 to 1993, mostly according to the old list of specialities and old curricula; second, a study of the situation in the industrial vocational education and training institutions in 1994, when real changes began to take place in the schools.

The main results of the research are the following:

- In conditions of democratization and the development of a market economy, vocational training institutions are getting more freedom in every area of activity and are searching for new social partners. The changes are going fast, and many industrial specialities for which there is no more demand are being shut down or modified, while new, more wanted ones are being introduced, especially in business and services.

- The demand for specialities is changing radically, as is clearly indicated by the number of applications per field of study. Students are active and wishing to take part in the choice of new courses.

- Vocational education and training institutions are facing big financial problems. The main source of financing is a budget allocated by the Ministry of Science and Education. Not only is this budget very limited, the finances are reaching the schools only partially and with delays. Such financial restrictions make real innovations impossible: the schools are barely living at the survival level. The system of educational financing in Lithuania is oriented toward keeping the existing system alive, but not toward the introduction of innovations. Salaries of teachers, trainers, and staff are very low; as a result, the best and the younger teachers tend to leave the schools for better-paid jobs. Those who remain have to find additional incomes, and they are therefore swamped with work, so the quality of teaching is going down.

Vocational education institutions now have three kinds of social partners:

- old industrial companies, which have many problems but are maintaining old relations and supporting VET institutions because of tradition and personal relations with managers, though such relations are quite weak and are tending to disappear;
- new private industrial companies, which have no problem finding the labour power they need without going through an agreement with a VET institution, but sometimes show an interest in personal training questions; usually VET institutions do not get any real benefit from such contacts; and
- new private and state-owned companies in business and services; often such companies are active in matters of training and are good partners for training institutions.

– The survey brings out differences between vocational schools and colleges, between the two regions of investigations, between male and female students, and among the various fields of specialization. Despite the fact that college graduates often find a job outside of their field of specialization, they seem to be better adapted to the new context. A simplified summary of the survey would be that male graduates from colleges in Vilnius work in small private enterprises, which are the most representative of the new developments of a market economy. Conversely, female graduates from vocational schools still tend to be recruited by the larger public industrial firms, especially in Alytus, and are more typical of the traditional pattern, which is particularly threatened by the new context.

– Many graduates of industrial schools and colleges do not work according to their speciality and do not get positions according their level of education because of a shortage of job positions in industry.

– A high proportion of the graduates are continuing their studies because they are lacking the necessary knowledge and skills to meet the present conditions.

Industrial vocational schools and colleges are now facing a difficult alternative:

- to close down for lack of students, who do not wish to study industrial specialities;
- to introduce new specialities in business and services, without being able to make investments and obtain qualified teachers, and lose the benefit of good and expensive equipment, workshops and experienced teachers.

The first steps of a market economy and democracy in Lithuania have challenged the

VET institutions. Real demand for training in many necessary specialities is forcing the schools to make changes to satisfy the new needs of young people, but without the financial support and promotion of innovations that they would need. A self-regulating financial mechanism needs to be developed and introduced into the system governing the relationship between the state, the labour market, and the educational system. The Ministry of Education and Science budget needs to be targeted better. Part of the taxes paid by employers, as well as of the budget of local municipalities could be used to supplement the budget of individual vocational education and training institutions.

Suggestions

1. General

– During the economic transition period, change curricula more in the direction of education, not training. Focus on the development of the attitudes and skills necessary for active positions in life, and for continuous learning and upgrading.

– Vary the duration of training in terms of the type of speciality and make most training shorter.

– Turn part of the vocational schools and general education secondary schools into a new kind of vocational education school (like the *Fachoberschule* in Germany). Such schools would provide some general courses necessary for vocational backgrounds, as well as applied courses, by groups of occupations (trades, agriculture, business and commerce, social services, construction, technology, etc.). Training in some of the occupations could be provided in limited amounts, mostly on the school premises. Such training would not necessarily be awarded a formal job qualification. The upper secondary exams in such schools would not have to be compulsory.

– In the general-education textbooks, schools should introduce some information on modern occupations in fields related to the course of the textbook.

– In the general-education science courses, introduce some basic knowledge necessary for vocational education. Orient the teaching in science courses towards professions in industry, technology, and science.

– Make the curricula less specialized.

– Allow college students to choose their group of courses in their last two years of studies.

2. In the field of research

Establish a vocational education research centre partly financed by the state, with the following fields of activities:

- systematic follow-up studies;
- curriculum development;
- textbooks and teaching-tools development;
- consultancy in international relations provided to the schools;
- forecasting of the labour-force demand in the different fields of the economy;

- financial estimation of costs per student and per field of vocational training.

3. In the field of follow-up studies

– Organize follow-up studies per school and per region.

– Organize a feedback of data from employment organizations to the Ministry of Education and Science as well as to vocational schools (ask people who register as unemployed about their school, their speciality, and their year of graduation).

– Make a distinction, in the indicators on unemployed people in the official statistics of the Labour Agencies, between vocational-school graduates and graduates of in-firm training courses.

4. Legal framework

– Allow financing of VET institutions by employers and municipalities (legally form the budget of VET institutions from different sources, not only from the Ministry of Education and Science).

– Approve as soon as possible some kind of a classification of specialities (occupations), such as the International Standard Classification of Occupations, ISCO-88.

– Introduce fees, especially in colleges, in the most demanded specialities.

– Invite foreign experts to evaluate law proposals on vocational education and adult education.

– Involve representatives of employers, municipalities, trade unions, and local authorities in all levels of vocational education and training management.

5. In the field of teacher and staff training

– Invite IIEP to organize a sub-regional workshop in Lithuania in "Education, employment and human resource development" for the Baltic countries.

– Introduce in the universities specialities in vocational-institution trainers and college teachers.

– Introduce in the universities specialities in school administration.

– Introduce courses on Human Resources Management, and Education Project Management and Elaboration in the teacher-training curricula.

References

Alisauskiene R., Serksniova B. (1993), *Baltic survey – The value of work of students who are studying*, Labour market, Lithuanian Institute of Information, Vilnius.

Brazauskas, H.E. Algirdas (President of the Republic of Lithuania) (1994), *Annual Address*, delivered in the Seimas on 10 February.

Ceikauskiene M. (1994), *Economic and social development of Lithuania. Analytical survey*, Lithuanian Institute of Information, Vilnius.

Danish Nurses' Organization (1994), *Project for Basic Education of Nurses in Lithuania*, Ministries of Health and Education, Republic of Lithuania, Vilnius, April.

Department of Statistics of the Lithuanian Government (1994), *Economic and Social Development of Lithuania in January-June 1994*, Vilnius.

Department of Statistics of the Lithuanian Government (1994), *Employed and Unemployed People*, Vilnius.

Department of Statistics of the Lithuanian Government (1994), *Students of Lithuania*, Vilnius.

General Concept of Education in Lithuania (1994), Publishing center, Vilnius.

Levickas, A. (1994), "Non-university higher education", conference in a course on College Reform and Problems, Vilnius.

Lithuania 1993 Statistics Yearbook (1994), Methodical Publishing Centre, Vilnius.

Lithuanian Institute of Information (1992), *Situation in the Labour Market. Work and Stable Employment*, Vilnius.

Lithuanian Institute of Information (1993), *Situation in the Labour Market in 1992*, Labour Market, Vilnius.

Lithuanian Institute of Information (1994), *Situation in the Labour Market in 1993*, Labour Market, Vilnius.

Lithuanian Ministry of Culture and Education (1994), *Students and Lecturers 1993/94 (Statistics of Colleges)*, Vilnius.

"Lithuanian Science and Industry" (1994), conference material, Kaunas, February.

Pocius, A. (1993), *The Situation of the Labour Market in 1993: Analysis and Predictions*, Department of statistics of Lithuania, Vilnius.

Pocius, A. (1994), *What Is the Real Unemployment in Lithuania?* Labour market, Lithuanian Institute of Information, Vilnius.

Pruskus, A. (1993), "Totalitarian and Democratic Educational Systems", *Tevynes sargas*, No.1 (79), pp. 35-45.

World Bank (1993), *Lithuania: Transit to a Market Economy*, World Bank country study ISSN 0253-2123, Washington, D.C.

World Bank (1994), *Trends in Developing Economies, 1993 Extracts, Volume 1, Eastern Europe and Central Asia*, Washington, D.C.

Appendix 1

Questionnaire for graduates of industrial vocational institutions

First we would like to get acquainted with you

1. Age (your birthday):

2. Sex: Male Female

Parents/Guardians education level:

3. Father's 4. Mother's

- Primary school.
- Basic school.
- Secondary school.
- Vocational school.
- College.
- Higher school

Parents/Guardians work in:

5. Father 6. Mother

- Public sector.
- Private sector.
- Unemployed.
- Pensioner.

7. Your education level:

- *Vocational school:* you completed groups where students hadn't completed the 9th form.
- *Vocational school:* you completed groups where students had completed the 9th form.
- *Vocational school:* you completed groups where students got secondary education.
- *Vocational school:* you completed groups where students completed secondary school.
- *College:* you completed groups where students got secondary education.
- *College:* you completed groups where students completed secondary school.

8. Name of vocational institution:

9. Your speciality:

We would like to know about your present activities

10. Do you work ?

- Have a permanent job, work full-time.
- Have a permanent job, work part-time.
- Work occasionally.
- Unemployed.
- Army.
- Study.

11. How much do you earn?

- Earn nothing, don't get any unemployment compensation.
- Get a compensation.
- Earn under 100 Lt.
- Earn under 200 Lt.
- Earn under 300 Lt.
- Earn under 400 Lt.
- Earn under 500 Lt.
- Earn more than 500 Lt.
- Earn more than 1000 Lt.

If you work or have your own business...

12. In what field of business do you work?

- Commerce.
- Manufacturing.
- Construction.
- Wholesale and retail trade.
- Agriculture.
- Transport and communication.
- Services, social and other .
- Other.

13. Who helped you to find a job?

- Vocational school/college.
- Practical training in enterprises during the study.
- Employment agency.
- Job advertisements.
- Parents, relatives, acquaintances.
- Yourself.
- Other means (please specify).

14. Where do you work?

- Public enterprise where less than 50 people work.
- Public enterprise where less than 200 people work.
- Public enterprise where 200-1,000 people work.
- Public enterprise where more than 1,000 people work.
- Private enterprise where less than 50 people work.
- Private-public enterprise where less than 200 people work.
- Private-public enterprise where 200-1,000 people work.
- Private-public enterprise where more than 1,000 people work.
- Other.

15. Is the enterprise where you work established

- By parents, relatives, acquaintances.
- By you.
- Other.

16. When did you begin to work after graduation from a vocational school/college?

- Just after graduation.
- In less than 3 months.
- In less than 6 months.
- In less than 9 months.
- In less than 12 months.
- Before graduation.

17. What kind of work are you doing now?

- Unskilled worker.
- Skilled worker.
- Technician.
- Supervisor.
- Other.

18. Is the work you do related with the speciality you trained for?

- Yes.
- Partly.
- No.

19. How many jobs have you had since graduation?

- This is my first job.
- This is my second job.
- This is my third job.
- Had more than three jobs.

20. What were the reasons for changing your job?

- Job not changed.
- Low salary.
- Family situation.
- Job not related with speciality.
- Job not related with qualification.
- Other.

If you have no job ...

21. Period of unemployment:

- Less than one month.
- Less than 3 months.
- Less than 6 months.
- Less than 9 months.
- Less than 12 months.

22. What do you do to try to get a job/start a business?
(Several answers are possible)

- Not looking for a job.
- Register at the Employment Agency.
- Ask family, relatives, acquaintances.
- Looking for advertisements in newspapers, on radio, TV.
- Trying to start business.
- Other.

23. What kind of job are you looking for?

- Related with my speciality.
- Partly related.
- Not related.

24. Why are you not looking for a job?

- Taking care of relatives/children.
- Tired of looking.
- Currently studying/training.
- Other (specify).

If you are training/studying now...

25. Where are you receiving training/course of study?

- Public course.
- Private course.

- Evening secondary school.
- Adult vocational training center.
- Vocational school.
- College.
- Higher school.
- Other.

26. What kind of education will you get?

27. Write the name of course or school:

28. For what reasons are you studying?

- My work.
- Cannot find a job related with speciality.
- Want to get another speciality.
- Other.

We would like you to evaluate the qualification you acquired at vocational school or college...

29. Do you use any of the training you received at vocational school/college in your current job?

- Yes.
- Partly.
- No.
- Have no job since leaving vocational school/college.

30. How has the vocational school/college prepared you for a job in the new economic conditions?

- Prepared well:
  - you need more theoretical knowledge than practical/training experience;
  - you need more practical/training experience than theoretical knowledge;
  - you need both practical/training experience and theoretical knowledge.

31. If you were to choose the speciality once more:

- Choose the same.
- Choose a close one.
- Choose another.
- Don't know.

32. Which statement do you agree with:

- I like my speciality and work.

- I like my speciality but not my work.
- I like my work but not my speciality.
- I like neither my speciality nor my work.

33. If you were a head of vocational school/college what kind of changes would you make in school life, and in the theoretical and practical preparation of students...

Thanks for your cooperation.

Appendix 2

Interview with managers of enterprises

I. General information about the enterprise

1. Is the enterprise private or public?
2. What industrial sector does it belong to?
3. What is the number of people employed?
4. What kind of production does it have?
5. What criteria are used in choosing employees ?
6. What development perspectives are planned for the enterprise:

   (1) in the are of production?
   (2) in human resources management?

7. The main problems of the enterprise:

   (1) financial;
   (2) labour force;
   (3) technology;
   (4) material;
   (5) equipment.

II. Recruitment of young workers and specialists

8. Did the enterprise recruit people last year and this year?
9. How many of them?
10. In what kind of specialities?
11. How many workers were employed last year and this year?
   11.1 Do you tend to employ as workers persons having finished or left schools, or persons having experience in work?
   11.2. What kind of education do they have?
   11.3 Do you recruit graduates from vocational schools and colleges?

      (1) If not, why?
      (2) If so, how many?
      (3) What vocational schools and colleges did they complete?
      (4) What specialities did they acquire?

   11.4 If you usually recruit experienced workers:

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(1) Why?
(2) What education do they have?
(3) What kind of work did they do until they came to this enterprise?
(4) How many of them were recruited?

12. How many technicians were employed last year and this year?
12.1 Do you tend to employ as technicians persons having finished or left schools, or persons having experience in work?
12.2 What kind of education do they have?
12.3 Do you recruit graduates from vocational schools and colleges?

(1) If not, why?
(2) If so, how many?
(3) What vocational schools and colleges did they complete?
(4) What specialities did they acquire?

12.4 If you usually recruit experienced workers:

(1) Why?
(2) What education do they have?
(3) What kind of work did they do until they came to this enterprise?
(4) How many of them were recruited?

13. How many supervisors were employed last and this year ?
13.1 Do you tend to employ as supervisors persons, having finished or left schools, or persons having experience in work?
13.2 What kind of education do they have?
13.3 Do you recruit graduates from vocational schools and colleges ?

(1) If not, why?
(2) If so, how many ?
(3) What vocational schools and colleges did they complete?
(4) What specialties did they acquire?

13.4 If you usually recruit experienced supervisors:

(1) Why?
(2) What education do they have?
(3) What kind of work did they do until they came to this enterprise?
(4) How many of them were recruited?

III. Relations between the enterprises and vet institutions

14. Does the enterprise have any relations with VET?

(1) vocational schools;
(2) colleges;
(3) vocational schools and colleges.

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14.1 Give their names

15. What kind of relations are they?

    (1) relations with VET administration;
    (2) relations with VET teachers;
    (3) relations with students who come for practice.

16. Do you take students in to practice for vocational training?

    If so, specify:

    (1) What kind of practice do they get?
    (2) How long does the practice last?
    (3) Is the practice paid?
17. Do you have the possibility of initiating and influencing the establishment of new specialties and specializations in VET?
18. Do you influence the elaboration of curricula and changes in them?
19. Does the personnel of the enterprise take part in the vocational training process in VET? How many people? Does the enterprise set conditions to take part in this process?
20. Do you recruit graduates from vocational schools and colleges who had practice in your enterprises? If not, why?
21. Has the enterprise sent students to the VET? How many? Do you pay any grant?
22. How many young workers left the enterprise last year and this year?
23. What were the reasons?
    (salary, working conditions, economic situation of the enterprise).

Appendix 3

Procedure of the survey

First phase

1. The survey was conducted in Vilnius and Alytus. The main differences in these two towns: proportion of private and public enterprises, non-employment rate, and the relations between educational institutions, local authorities and employers.

2. Three industrial colleges and five vocational institutions were selected from Vilnius and Alytus. The industrial specialities in these institutions were selected too.

3. The addresses of graduates were obtained by the staff of eight vocational schools on 10-30 March 1994.

4. The questionnaire was elaborated and a pilot test was done with young workers and with graduates from Vilnius 2nd Construction Workers School in Lithuanian and Russian groups on 2-14 April.

5. The questionnaires were modified in the light of the pilot test and copies were made on 15-25 April.

6. The questionnaires were mailed to the graduates on 25 April-3 May.

7. The graduates sent back their answers on 5 May-30 June.

8. The data was coded and an elementary statistical analysis was done in May-June-July 1994.

Second phase

9. Repeated questioning by mail was done in May - 18 June and repeated letters were sent to graduates from Vilnius 1st and 2nd Polytechnic schools, and Vilnius Radioelectronics and Precision Mechanics School.

10. Graduates were sent back the final and additional results during June-July 1994.

Some remarks

1. The graduates could phone and get additional information if they had any questions during the entire period of the survey (May-June-15 July): 21 graduates and parents called up for additional information during the period of survey. The main questions were following:

- six graduates wanted to get additional information about the survey and said they were interested in the results;
- four mothers of graduates wanted to know what to do with questionnaire because their sons were serving in the army;
- two teachers called because the graduates lived somewhere else;
- three graduates wanted to get additional information on how to answer the questionnaire;
- two young men said that they were going abroad and were not interested in the survey;
- five graduates wanted to know if this survey would help them to find a job.

2. Fifty graduates who did not respond to the questionnaire were called in Vilnius.

The results of the calls showed that:

- 36 per cent of the graduates had moved.
- 8 per cent had sent the questionnaires.
- 10 per cent were in the army.
- 20 per cent, according to the parents, were on vacation, were living in villages or were on business trips.
- 14 per cent said that they had lost the questionnaires.
- 8 per cent did not answer the phone.
- Overall, 26 per cent were employed, 14 per cent were unemployed, and 6 per cent were studying.

Appendix 4

Time it took currently employed graduates to find a job, by type of institution, by region, and by gender

Table Annex.

		Job found before graduation	Just after graguation	Less than 3 months	Less than 6 months	Less than 9 months	Less than 12 months	Row total
College		3	56	41	38	21	13	172
	Per cent	1.7	32.6	23.8	22.1	12.2	7.6	53.6
Vocational school			54	41	26	10	18	149
	Per cent		36.2	27.5	17.4	6.7	12.1	46.4
Vilnius		3	78	59	44	24	23	231
	Per cent	1.7	33.8	25.5	19.0	10.4	10.0	72.0
Alytus			32	23	20	7	8	90
	Per cent		35.6	25.6	22.2	7.8	8.9	28.0
Column total		3	110	82	64	31	31	321
	Per cent	0.9	34.3	25.5	19.9	9.7	9.7	100.0
Male		3	77	59	50	21	21	231
	Per cent	1.3	33.3	25.5	21.6	9.1	9.1	71.7
Female			33	23	15	10	10	91
	Per cent		36.3	25.3	16.5	11.0	11.0	28.3
Column total		3	110	82	65	31	31	322
	Per cent	0.9	34.2	25.5	20.2	9.6	9.6	100.0
Column total		3	82	65	30	31	110	321
	Per cent	0.9	25.5	20.2	9.3	3.7	34.3	100.0

Diagnosis of the Estonian vocational education system: indicators for evaluation and monitoring

by Reet Neudorf

Acknowledgements

This report would not have been possible without the financial support and mentorship of the International Institute for Educational Planning (IIEP). Françoise Caillods, Olivier Bertrand, and David Atchoarena have provided valuable advice.

Kaie Teetlok, Helle Veetamm, Made Kirtsi, Viive Ruus, and Sharon Davidson of the Estonian Ministry of Culture and Education have also helped to produce this report, often working on it in their own time. Their contributions and moral support were invaluable.

Diagnosis of the Estonian vocational education system: indicators for evaluation and monitoring

by Reet Neudorf

1. Introduction

Modernizing Estonia's vocational education system is an essential part of the current process of developing a viable market economy and encouraging democratic reform. The vocational system had suffered from neglect under past administrators and that damage must be repaired. Structural reforms are necessary, within the vocational system as well as throughout the economy, in order to ensure a smooth transition to a market economy.

There is an increased need for relevant information in order to guide policy formulation and planning. Estonia has begun to develop databases which will help the Ministry of Culture and Education determine the direction of future policy. We can now answer the questions "how many?," and "how much?" from the information collected in these databases, but we need to determine how well we are doing. In order to facilitate our transition period we need more accurate quantitative and qualitative tools to measure educational process and products.

An educational indicator tells about the performance or behaviour of an educational system and can be used to guide decisionmaking. Individual indicators contain only a limited amount of information; a system of indicators is necessary in order to develop an accurate portrayal of the state of education in any country at a given time. This work will attempt to diagnose some of the problems in the Estonian system of vocational education from known indicators. It is based on data from educational databases.

The research presented in this document has been compiled in order to meet these three aims:

- it describes and evaluates some aspects of Estonian statistical databases for education;
- it describes and evaluates the Estonian system of vocational education;
- it suggests necessary changes for both the Estonian system of vocational education and Estonia's educational databases.

The report is divided into three distinct parts:

Part I – an overview of the socio-economic and demographic background;
Part II – a description of the entire educational system which focuses on the vocational education system and how it is monitored;
Part III – a comment on the vocational education system, and proposals for improving existing databases.

Part I

The socio-economic and demographic background

The year 1993 marked the first year of the economic independence in Estonia. The focus of economic policy at that time on the establishment of an independent monetary system. Today, the global recession that began in the early 1990s is ending, and several spheres of the economy are starting to recover. The stabilization of Estonia's economy has been achieved by restructuring the production process, orienting production to the western market, and following a strict monetary policy.

The transition from a planned economy to a market economy has brought along remarkable structural changes. During the Soviet period, the economy was structured to meet the needs of the Soviet Union's centralized system; economic decision making did not tanke into account the local situation. The production of both industry and agriculture was oriented to the eastern market. The extent to which industry was structured to meet the needs of Moscow can be seen in the shift of management responsibility which took place over a twenty-year period. During the 1960s, 98 per cent of the industrial enterprises which provided for civilian needs in Estonia were administered by the Estonian level of government. By 1988, only 14.5 per cent of those industries were still managed by Estonian government ministries; the remaining 85.5 per cent were under the supervision of the Soviet Union's central government in Moscow.

Post-independence economic policy faces the need to reorganize industry as it had deteriorated under the central administration from Moscow. Soviet industrial structure was largely based on co-operation contracts. Co-operation contracts tended to limit the types of industry established in any one area, so that the range of industries introduced was too specialized in its activities to support an independent state. The distribution of production and importation of raw material led to the dependence of the Estonian economy upon Soviet republics. During the Soviet occupation, 95 per cent of exports and 80-85 per cent of imports had been linked to the Soviet Union. Change was crucial to the survival of an independent country.

As of 1991, changes started to take place in the structure and orientation of the Estonian economy. Production had been based on the importation of cheap raw material from the USSR, thus the partial transition to the use of western raw material and fuel increased production prices. Export to the East decreased for conomic and political reasons (e.g. customs barriers).

Within Estonia, the low purchasing power of the local market has hampered necessary changes in production. The development of new products that are able to compete on the western market has been quite slow. Modernisation of technology and equipment, and in-service training of employees are necessary to ensure high-quality production and competitive prices. Most sectors of the economy lack the necessary resources to solve these problems.

Estonia's industry is still in a process of redevelopment. The slow privatisation of large industrial enterprises has created an unfavourable situation for reorganising production processes; many enterprises are still seeking new owners. Industrial output has decreased by 40 per cent since 1989. Given a situation in which the state has lacked the resources to help large, technologically obsolete industries which have lost their primary markets and suppliers, those industries would seem to have little hope of success and job-loss seems inevitable.

The realization of these facts has encouraged entrepreneurs to find new markets, develop feasible business projects, and reorganize large industries. The result of these activities has been a stabilization of the economy and a moderate rate of growth, but it has also created a shift in the type of enterprises that are now able to employ people.

Light industry faces difficulties, especially in the field of textiles. Exports to the Commonwealth of Independent States have decreased substantially, and re-orientation to the West requires time and an overall improvement in production quality and competitiveness. In comparison to 1992, production has decreased by 53 per cent in the textile industry. This figure represents a large part of the decrease in light industry production. Footwear production has decreased by 47 per cent. The situation is not as dramatic in the clothing and fur industry, where production has decreased by 22.7 per cent in comparison with 1993.

Within the food industry, a decrease in the fixed minimum prices for farmers has led to a decrease in agricultural production and a decline in meat and dairy farming. Given the public's limited purchasing power, farmers cannot continually raise prices.

Imported food products have begun to offer competition, and local producers are no longer in a position to dictate price and quality levels.

1. Demographic conditions

As of January 1, 1994 the permanent population of Estonia numbered, approximately, 1,507,000. 70.3 per cent live in urban centres and 29.7 per cent in rural areas. The total number of people of working age has decreased from 878,417 in 1991, to 840,790 in 1994, that, is by 4.3 per cent. This decrease has been largely caused by emigration. The decrease in the number of employable people is worrying, as the percentage of dependents in the Estonian economy is fairly high. According to the Bank of Estonia, at the beginning of 1994, there were 40 pre-working age people and 39 people of retirement age for every 100 people of working age. ("Eesti majanduse reaalsektori lühiülevaade". Eesti Pank, 1994, page12)

Although seventy-nine dependents to every 100 members of the working population seems excessive, the figures calculated by the Bank of Estonia are congruous with those calculated by the Statistics Office of Estonia. The dependency rate results from the low retirement age of the population, combined with a large number of young people. The retirement age for women is officially 55 at the present time in Estonia. Although the retirement age for men is officially 60. (Statistical Office of Estonia, 'Rahvastiku Vanuskoostis', 1994)

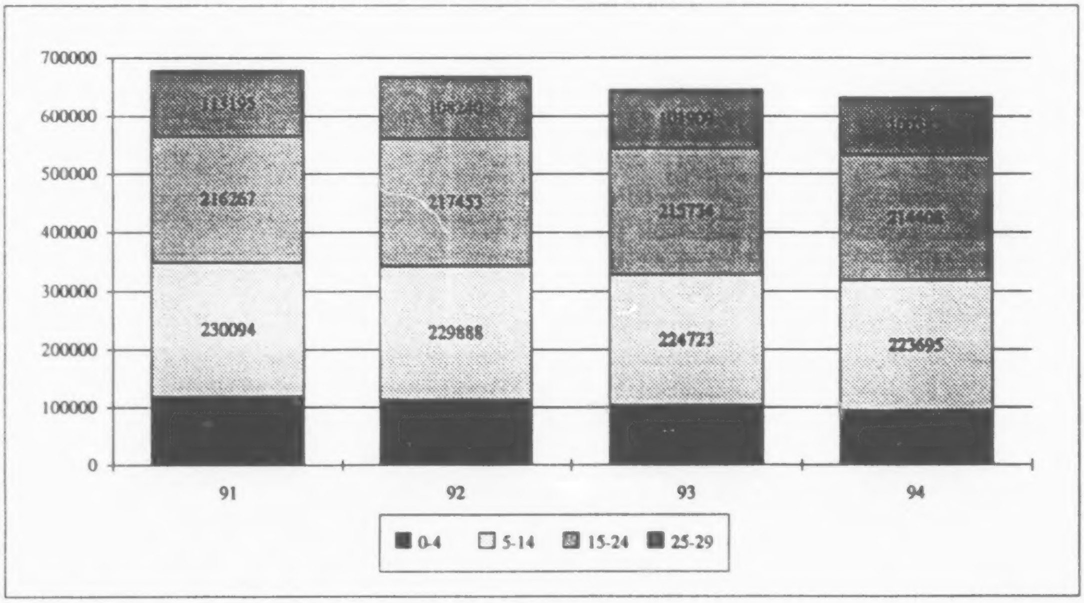
Table 1. The relative size of the young population in Estonia from 1991 - 1994

Definition

The relative size of the young population is the number of people 5 - 29 years of age per 100 people in total population

Year	Total population	Age groups									
		5-29	%	0-4	%	5-14	%	15-24	%	25-29	%
91	**1570451**	**678459**	*43%*	118903	*8%*	230094	*15%*	216267	*14%*	113195	7%
92	**1562216**	**668823**	*43%*	113242	*7%*	229888	*15%*	217453	*14%*	108240	7%
93	**1526531**	**646178**	*42%*	103812	*7%*	224723	*15%*	215734	*14%*	101909	7%
94	**1506927**	**632947**	*42%*	94457	*6%*	223695	*15%*	214408	*14%*	100387	7%

Diagram 1. Distribution of the young population by age group



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The indicator: 'The relative size of the young population' shows that a large percentage of the Estonian population is relatively young (*Table 1*). (The Ministry of Culture and Education and the Statistical Office of Estonia). This indicator is comprised of the number of people 5-29 years of age per 100 people in the total population, including all nationals present in or temporarily absent from the country and aliens permanently settled in the country. In 1991 the OECD indicator, (comprised of the figures from Portugal, Ireland and Turkey) indicated that the percentage of peoplein those countries between the ages of 5-29 was more than 40 per cent of the total population, in Estonia it was 43 per cent in 1991.

Estonia also has a greater percentage of its population in an even young age bracket. The number of Estonian people who are between 5 and 14 years of age is one percent larger than the group 15-24 years of age. Demographic factors influence the distribution of resources, hence the allocation of funds to education is vital. The demand for educational services is dependent upon the number of young people in a nation, and the statistics indicate that Estonia's need of educational services is pressing.

Nevertheless, economic and political change have also caused dramatic social change. We have added the figures for the population aged 0-4 to the table: 'The relative size of the young population in 1991-1994' as the birth rate has decreased phenomenally over the past five years and is expected to continue decreasing this year. In 1989 24,300 births were registered; in 1993, only 15,400 were registered. Since 1991, the accretion has been negative.

It remains to be seen whether the decline in the birth rate is going to be a long-term trend that will have extensive repercussions on the Estonian system of education, or whether it is simply a temporary abberation. The period between 1989 and 1993 was a time of extensive change for Estonia. The decline in the birth rate may have been a result of caution in a time of political and social uncertainty and it could reverse itself over the next few years. On the other hand, the transition to the market economy is making goods (and thus the cost of raising children) more expensive, and the mobility of women in the work-force is increasing: factors which could help to keep the birth rate low. It is interesting to note that the decline in the birth rate is partially a result of a reduction in the number children each family is having. More research is needed, however, to determine why this trend has occurred and whether or not it is permanent.

2. Entrepreneurship

In 1986, enterprises which operated on a prfit-making basis numbered 1,600. The shift from the Soviet rouble to the Estonian national currency, (kroon – EEK), made on June 20,1992 was an essential precondition for entrepreneurship. Estonian enterprises have a stable fiscal environment as a result of the exchange rate of the kroon, which is pegged to the German mark (1 DM = 8 EEK). As of early 1994, 70,000 enterprises had legally registered with the Estonian Entrepreneurs Register and 20,000 of those enterprises had functional operations. The disparity between the number of enterprises registered, and the number that are functional is reflected in the apparent incongruity of *Diagram 2*, 'Enterprises per 1,000 inhabitants by region at 01.01.94', and *Diagram 3*. 'Unemployment rate by region in 01.01.94'. Although *Diagram 2* shows the rate of enterprises per 1,000 inhabitants to be highest in the regions of Põlva and Hiiumaa, *Diagram 3* shows that both of those regions have rates of unemployment that are among the highest in Estonia.

Diagram 2. Enterprises per 1000 inhabitants by regions at 1.1.94

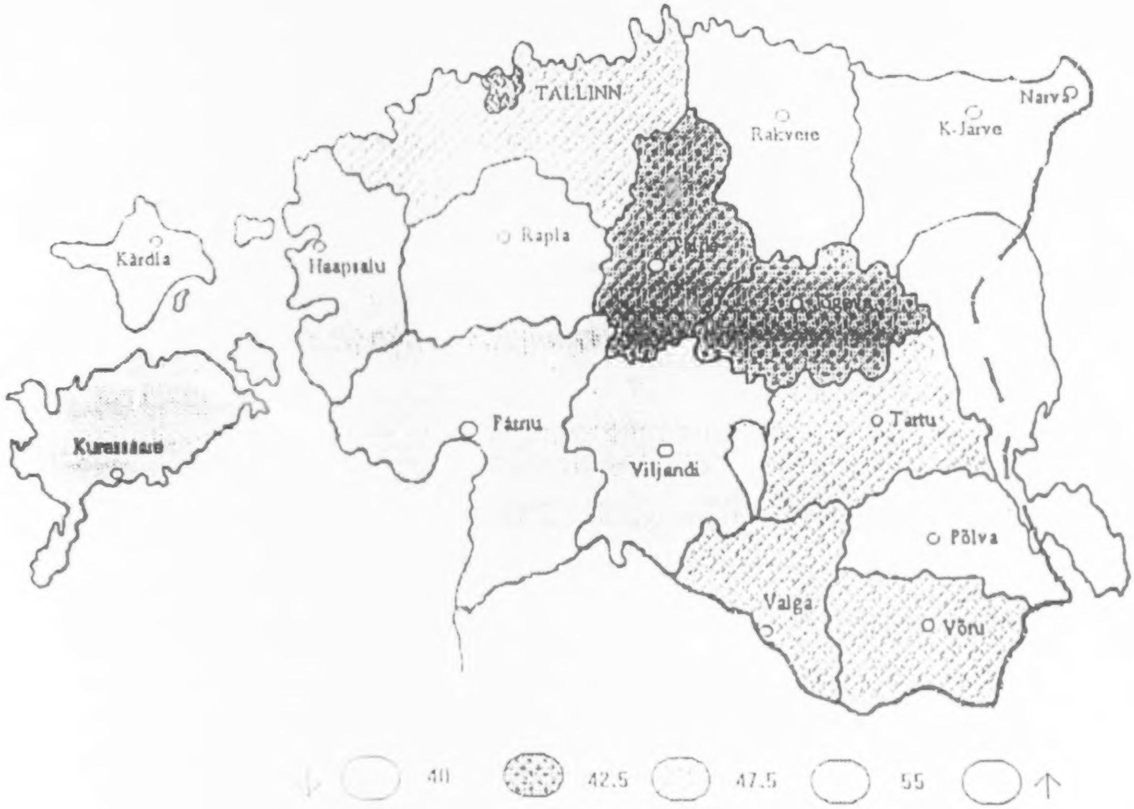

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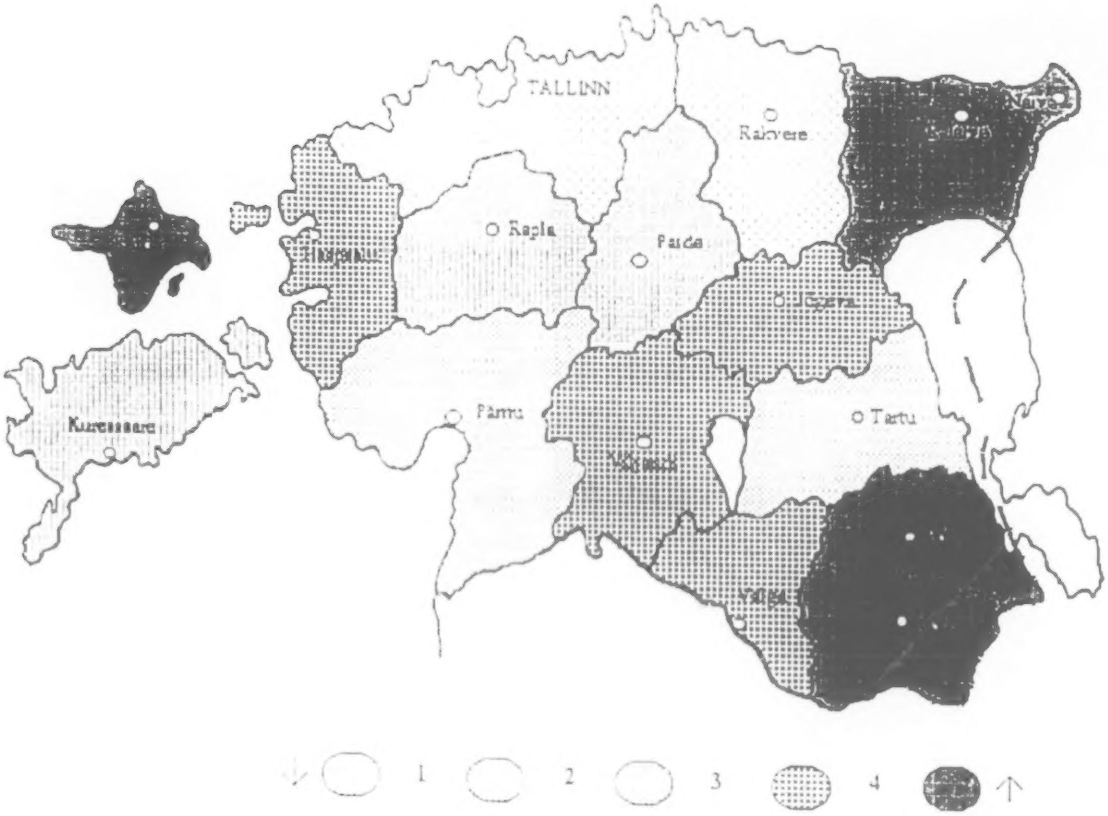
Diagram 3. Unemployment rate by region at 1.1.94



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This is not an error in our statistics, but a reflection of the optimism with which many Estonians greeted the transition to a market economy. It was relatively simple to register a new enterprise, but proved to be much more difficult to establish one. It is essential that the government help transform that optimism into reality through mechanisms like a sound vocational education.

Many of the enterprises that are functional are small or medium-sized firms, as is shown in the following statistics:

- 73.4 per cent of the enterprises had less than 20 employees; they engaged 12.9 per cent of the total number of people employed in private enterprise.
- 23.9 per cent of the enterprises employed 20-199 people; 39.7 per cent of the people working in private enterprises found employment in those medium-sized firms.
- The remaining 47.4 per cent of the people working in private enterprises were employed in 27 per cent of industry. These firms had more than 200 employees.

Estonia has a high percentage of small enterprises, most of which are based on private capital. This category of employer will become increasingly important as the restructuring process continues.

Small to medium-sized enterprises (fewer than 500 employees) are currently responsible for more than two-thirds of employment within the European Community. They also generate more than two-thirds of Community turnover (70.3 per cent) of which 29 per cent is accounted for by firms with less than ten employees. These businesses also generate between 65 per cent and 85 per cent of value-added in those countries for which data is available. (*White Paper*. "Growth, competitiveness, employment: the challenges and ways forward into the 21st Century". Commission of the European Communities, December 1993. The development of an effective system of vocational education which is able to train a self-motivated and flexible workforce, with the skills to work in small enterprises, is essential.

Another trend that will have to be addressed, in part through vocational training, is the development of regional inequalities. Entrepreneurship is concentrated in Tallinn, where there are 43 enterprises per 1,000 inhabitants registered, a large proportion of which are functional. Vocational schools will have to train people in towns and rural areas in both the practical and administrative skills needed for entrepreneurship, as large regional inequities are undesirable.

3. Labour force and employment

As of the 1989 census, 51.8 per cent of the population was employed. Early in 1994, the employment rate stood at 43.4 per cent (654,000) of which 630,500 were full-time employees. The employment rate of working-age people, working in the public sector has decreased from 86%-87% before reforms to 72%-73%. Employment was artificially kept on a high level in former times. One fifth of the working-age people do not work and are not looking for a job, most of them are mothers on childcare leave.

Employees' rates of mobility have increased from the late 1980s when they were, on average, 11-12 per cent. In 1994, 232,000 people were dismissed and about 143,000 got a job. In 1993 the mobility dropped slightly, as can be seen by comparing the figures for 1991 when the number of full-time employees dropped by 12,100, and in 1993 when the number of full-time employees dropped by 6,000.

In terms of employment, the stabilization of the labour market began in the second half of 1993. The number of registered unemployed decreased in the second half of the year, without there being an increase in the total number of unemployed and those looking for a job. The data from the Ministry of Social Affairs shows the number of people who have found full-time employment and the number of people dismissed:

Table 2. Changes in the labour market, 1992-1993

Year	Number of people who found full-time employment	Number of people dismissed
1992	143,000	242,000
1993 (9 months)	96,000	114,000
1994 (12 months)	98,000	120,000

The ability of economic sectors to create full-time employment has changed quite rapidly, as can be seen on the chart below.

Table 3. Employment and percentage of employment distribution by sectors, 1991-1994

Sector	No.of people employed as of 01.01.92	% of people employed	No.of people employed as of 1.1.93	% of people employed	No.of people employed as of 1.1.94	%of people employed
Agriculture, forestry,fishery	123,900	19.1 %	94,300	16.6 %	58,400	10.7 %
Industry	203,400	31.4 %	161,600	28.5 %	146,700	27.0 %
Energy	15,200	2.3 %	15,300	2.7 %	14,300	2.6 %
Construction	43,000	6.6 %	35,000	6.1 %	36,900	6.8 %
Trade, catering, hotels	62,300	9.6 %	52,200	9.2 %	66,000	12.1 %
Transport, communica-tions	66,100	10.2 %	55,000	9.7 %	50,700	9.3 %
Finance, insurance	23,70	3.7 %	24,400	4.3 %	32,400	6.0 %
Social and personal service activities	107,400	16.6 %	123,800	21.9 %	135,800	25.0 %
Other	3,100	0.5 %	5,400	1.0 %	3,000	0.5 %
Total	648,100	100.0 %	567,000	100.0 %	544,200	100.0 %

Source: Ministry of Finance, 1994 *Eesti Vabariigi majanduslikust seisundist ja riigieelarve täitmisest 1993. aastal, p.13.*

Employment in industry and agriculture is decreasing. There is ongoing reform in agriculture. The state farms and collective farms which used to produce mainly for the Soviet Union market are going to fall to pieces as change is taking place in agriculture. The rate of employment is, however, growing in the service sector. As of 1.1.1994 the number of people employed in the national economy numbered 661,000 (including part-time). A total of 654,000 of these people earn some form of salary or wage; the others are employed without remuneration. The number of salary earners suffers from attrition, but the rate of decrease has slowed down in the past year. In 1992, the number of salary-earners decreased by 11.2 per cent; in 1993, it decreased by 6.8 per cent. In 1994, a 3.5 per cent decrease is anticipated by the Ministry of Social Affairs. The number of partially employed people is also decreasing.

According to data from the Labour Board, in 1993, 30,000 employees from 257 enterprises were sent on partially compensated vacation, and 30,600 people from 201 enterprises who had worked as full-time employees were reduced to part-time works. As of 1.1.94, 502 employees from 24 enterprises were on partially compensated vacation and 1,739 positions in 21 enterprises were reduced to part-time works. The Labour Board anticipates the continuation of this stabilization process.

As of June 1991, the unemployed have been registered officially for distribution of benefits. In order to be registered as unemployed a person must:

- be of working age (16 to retirement) and be able to work;
- have been employed for a period of at least 180 days before applying to the Labour Board;
- not be working or earning income from other sources;
- be actively looking for employment but not able to find any work because of reasons beyond his or her control. The person must be ready, willing, and able to commence full-time employment.

The number of unemployed reached its apex in May 1993, and the unemployment rate is now declining. *Diagram 2*, 'Unemployment rate at region in 1.1.94's hows data on unemployment by region.

The official unemployment rate is relatively low, it is lower than the average in Europe. The methods used for computing unemployment rates in 1.01.94 were:

1.	Officially unemployed/working-age population	1.98 per cent
2.	Persons approaching the labour exchange/ working-age population	4.31per cent
3.	Persons approaching the labour exchange + part-time workers + workers on leave/working-age population	4.57 per cent
4.	Persons approaching the labour exchange + part-time workers + workers on leave/ active population	5.61 per cent

Source: Labour Board, Infoleht

The gender composition of the unemployed is relatively balanced, although the proportion of men and older workers has increased lately.

4. Salary

Salary growth is being ensured for some sectors by the development of entrepreneurship, privatisation, and restructuring enterprises and by the increase in local and foreign capital available for investment. *Table 4*, 'Average monthly wage (gross) and index of wages by economic activities' and *Diagrams 4* and *5*, 'Indexes of wages in relation to the average gross wages, 1992 and 1993', characterize the average gross salary per month and the salary index by main fields of activity.

The average salary per person was 1,371 EEK in March 1994 (1DM = 8EEK). Salaries only increased by 0.4 per cent between February and March 1994, but they increased by 30.6 per cent in comparison to March 1993. According to the bank's average currency rate, the median salary in March, 1994, was 101 USD.

The largest salaries were earned in the banking system which averaged 2,200 EEK per person. Other industries with high salaries were: construction 1,770 EEK, transport and communications 1,768 EEK, mining 1,592 EEK, national defence and government institutions 1,558 EEK. The lowest salary in March was in the sphere of health and social care [illegible] EEK. If compared by types of enterprises, the highest salary was in private enterprises, followed by joint ventures and state enterprises.

Table 4.

Table 4. Average monthly wage (gross) and index of wages by economic activities 1992-1993

	Wage (gross) kroons		Index of wages	
	1992	1993	1992	1993
Agriculture, hunting	388	641	70,7	60,1
Forestry	473	908	86,2	85,2
Fishing	540	1229	98,4	115,3
Mining and quarrying	737	1487	134,2	139,5
Manufacturing	536	1036	97,6	97,2
Electricity, gas and water supply	835	1467	152,1	137,6
Construction	647	1264	117,9	118,6
Wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods	516	917	94	86
Hotels and restaurants	403	796	73,4	73,7
Transport, storage and communications	867	1741	157,9	163,3
Finance	1078	2496	196,4	234,1
Real estate, renting and business activities	488	1031	88,9	96,7
Public administration and defence; compulsory social security	533	1103	97,1	103,5
Education	459	850	83,6	79,7
Health and social work	415	818	75,6	76,7
Other community, social and personal service activities	437	825	79,6	77,4
Average	549	1066	549=100.0	1066=100,0

Indexes of wages in relation to the average gross wages, 1992

Diagram 4

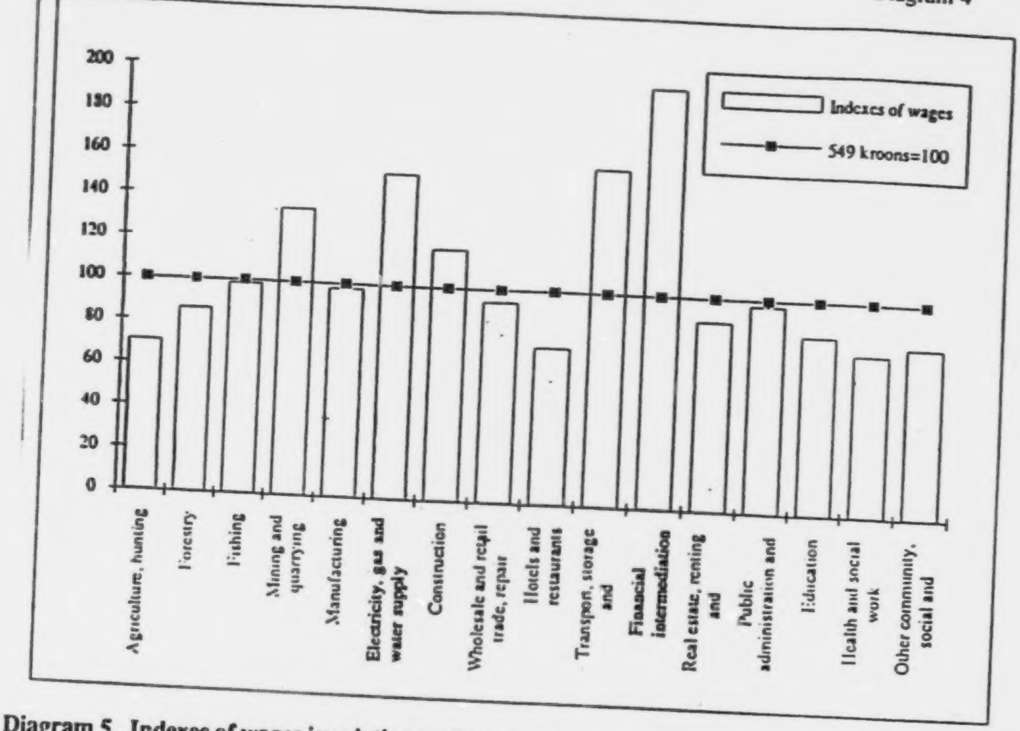
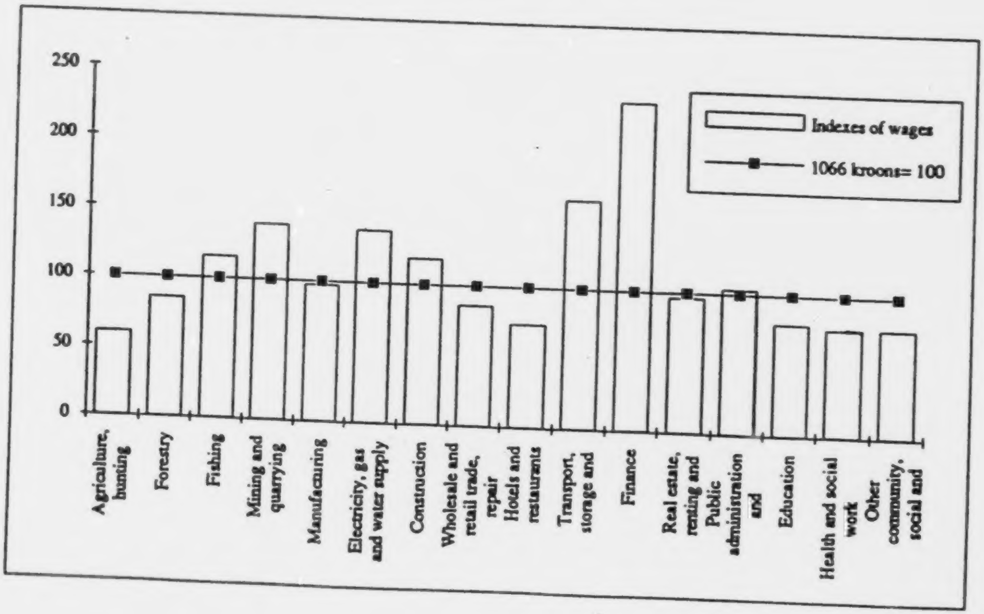


Diagram 5. Indexes of wages in relation to the average gross wages, 1993



Part II

The vocational education system in Estonia and its monitoring

1. The historical background of Estonian education

Latin-language cathedral and monastery schools were established in the mid-13th century in Estonia, and Latin-language municipal schools flourished from the 15th to 16th century. Estonian peasant schools were founded in 1689. Each parish had its own school. In 1630 the first secondary school was founded in Tartu and in 1631 another was built in Tallinn. The Academia Gustaviana (Tartu University), was founded in 1632. In the 1780s, Estonia had a literacy rate of 40-50 per cent. A stable school system began to take shape at the beginning of the 19th century. According to the 1887 census 77.7 per cent of the population could read and write, and 96.2 per cent could read.

When the Tsarist government introduced its Russification policies into the Baltic States during the 1880s, all schools were required to teach in Russian. The independent Republic of Estonia introduced Estonian-language primary, secondary and tertiary education in 1919. Primary education was free and compulsory from the age of 7 or 8 to 16. A network of vocational schools was also established. After the occupation of Estonia by the USSR in 1940, the Soviet educational system was grafted onto the existing Estonian establishment, and the majority of textbooks were translated from Russian into Estonian. Both Estonians and Russians had the option of being educated in their native languages in Estonia.

2. Educational attainment of the population

It should be noted that in the Estonian system of education, the term 'secondary education' encompasses education obtained at gymnasiums (upper secondary general education), vocational schools, and post-secondary technical schools.

The educational attainment of the Estonian working-age population can be determined from the indicator: 'Educational attainment of the population' which was based on the 1989 census. The difference between the Estonian and OECD indicators can largely be accounted for by the fact that the OECD bases its percentages on *adult* population (25-64). Estonia bases its percentages on *working-age* population, which is considered to be 16-54 for women and 16-59 for men. In the 1989 census (during the Soviet occupation), the levels of education outlined below were distinguished. The Estonian educational system has undergone a process of restructuring since 1989, so the categories used in the census have shifted, as is also shown in *Table 5* below. Nevertheless, the 1989 figures are the most recent indicators of the educational attainment of the Estonian population available, so they have been incorporated into this report.

Table 5. Relation of categories used in Soviet, Estonian and ISCED classification systems

Categories used in 1989 census to define levels of education	Grades which correspond with 1989 category	ISCED Level equivalent to 1989 category	Categories used in Estonian system of education as of 1992	Grades which correspond with Estonian categories	Estonian numeric categories established in 1992	ISCID Equiv. to Estonian category
Primary education	1-4	1	Elementary school	1-6	1	1
Lower secondary education	5-8	2	Basic school ++	7-9	2	2
Upper secondary education	9-11	3	Gymnasium or Vocational level	10-12 2 to 3 years after grade 9, depending upon the vocational programme followed	3 3	3 3
Post-secondary technical education		3 (5)	Post- secondary technical education*	4-4.5 years if started when student has finished basic education or 2-2.5 year programme, if started when student has completed general secondary education	4	3 (5)
Not-completed higher education	**	5				
Higher education	University degree	6,7	Tertiary education	Institutes of applied higher education and Universities	5 6,7,8	6 6,7

++ Some vocational classes are available at the basic school level (grades 7 to 9). These classes are, however, limited and do not constitute a separate part of the educational system.

* ost-secondary technical education can be acquired either after basic education (compulsory 9-year education), in which case the student would have to complete an additional 4 years of study; or after general secondary education (grades 10 to 12 in the new Estonian system) with an additional 2-3 years of studies. It has to be decided whether this education level corresponds to ISCED level 3 or ISCED level 5.

** ot-completed higher education: The term was used in the Soviet-imposed system of education to designate people who had studied at a university or higher educational institution for at least 3 years and were given a certificate based on that experience. This level does not exist any more.

There is still some debate as to how the Estonian vocational system fits into ISCED categories, especially at the level of post-secondary technical education. *Table 6* has been included in this document to give the reader unfamiliar with the Estonian system of education, a more detailed idea of how the system has been evaluated in Estonia.

Table 6. Categories in the Estonian system of vocational education

	Estonian numeric category	**Educational attainment of students upon entering programme**	**Duration of programme**	**Certificate acquired at end of programme**	**Transition to tertiary education possible?**
VOCATIONAL SCHOOL	**3.0**	**Have not completed lower secondary level of basic education (Grades 7-9)**	**Up to 3 years, depending upon level of previous basic education**	**Basic vocational education**	**No**
	3.1	**Basic education (Grade 9)**	**Up to 3 years**	**Vocational education**	**No**
	3.2	**Basic education (Grade 9)**	**4 years**	**Vocational education and Upper secondary general education**	**Yes**
	3.3	**Gymnasium (Grade 12 of a programme of upper secondary general education)**	**2 years**	**Vocational education (Already have a certificate of Upper secondary general education)**	**Yes**
	3.9	**Not defined**	**Up to 2 years**	**Vocational education (limited skills)**	**Depends upon level of basic education**
Post-secondary technical school	**4.1**	**Basic education (Grade 9)**	**5 years**	**Post-secondary technical education**	**Yes**
	4.2	**Gymnasium (Grade 12 of a programme of upper secondary general education)**	**2.5 years**	**Post-secondary technical education**	**Yes**

There is a working group within the Ministry of Culture and Education whose task is to bring Estonian education classifiers in line with those of the ISCED. *Table 7* compares figures relating to Estonian education, using two possible ISCED levels for post-secondary technical education. This table shows the different possible values of the indicator for the educational attainment of the population.

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Table 7. Educational attainment of the population in 1989

	Primary & lower secondary education ISCED levels 1 & 2	Upper secondary education ISCED level 3	Tertiary education (university and non-university) ISCED levels 5, 6 & 7
If post-secondary technical education in the estonian system equals isced level 3	28 per cent	55 per cent	17 per cent
If post-secondary technical education in the estonian system equals isced level 5	28 per cent	30 per cent	42 per cent
OECD Indicator c1(a) 1991: the country mean of the level of educational attainment of the Population	45 per cent	36 per cent	19 per cent

In 1991, the OECD indicator for educational attainment, (C1(A)) showed that in most countries more than half of the population aged 25-64 have completed at least upper secondary education. The age group identified in the Estonian statistics (16-54 or 59) does tend to skew the results, as it contains a high proportion of younger people who necessarily have lower educational attainment than those charted in the OECD statistics. Nonetheless, it is evident that the educational attainment of the Estonian population is relatively high.

2. The education system and vocational education

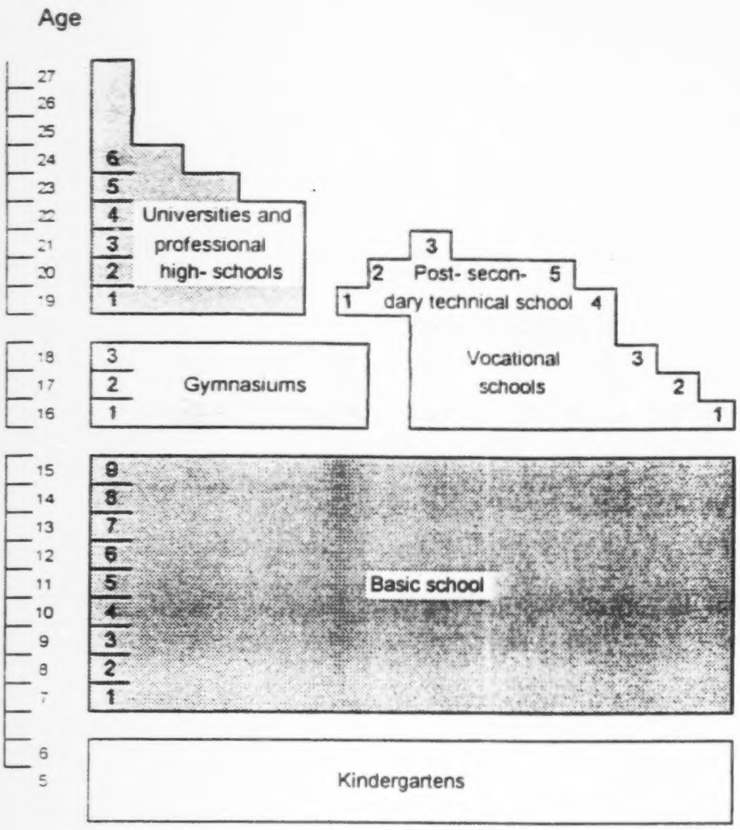
2.1 The education system

The current system of education, (outlined in *Diagram 6)*, covers pre-school education in kindergartens; general education in primary and basic schools and gymnasiums (upper secondary general schools); vocational education; and higher education at universities and institutions of applied higher education. For handicapped children there are special basic schools, upper secondary schools and one vocational school.

According to the Law on Education, *Chapter III*, Article 17, Paragraph 1, a child is obliged to attend school if he or she turns seven by October 1 of the current year. The law requires compulsory education until the student becomes 17, or graduation from Basic School *(Põhikool)* is achieved. The basic school level covers categories 1 and 2 in the ISCED-classification. After graduating from a basic school a young person has the opportunity and the obligation to decide whether to continue studies at a school which offers upper-secondary general academic education *(Gümnaasium)*, a vocational school or a post-secondary technical school. Students at the upper-secondary level of education, (whether vocational or general), are typically between the ages of 15 and 19.

Diagram 6

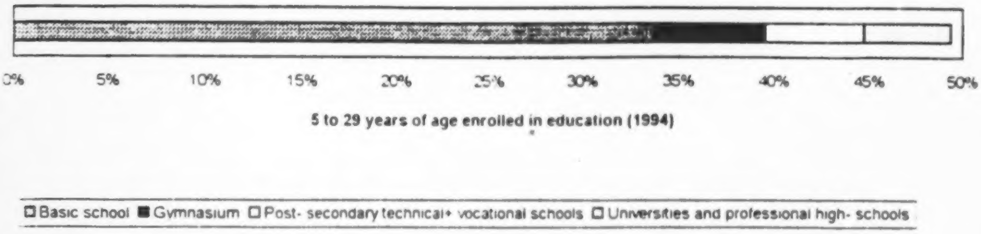
Structure of education in Estonia



LEVEL CATEGORIES

8 – doctor's degree
7 – master's degree
6 – university diploma, bachelor's degree
5 – professional higher education
4 – professional secondary education
3 – secondary education grades 10–12
– vocational education
2 – basic education grades 5–9
1 – primary education grades 1–4
0 – preprimary education kindergartens

Participation in formal education



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Upper-secondary general education in gymnasia can meet the needs of students with different educational profiles. Some gymnasia also offer courses in commerce, technology and other practical studies. Gymnasia, however, offer these courses as part of a largely academic programme. The education at a gymnasium is equivalent to level category 3 in ISCED.

Although vocational training is not offered in basic school, it is possible to complete basic school education within the vocational system. These classes do not constitute a separate programme. They provide some training for students who are not academically inclined, and increase the possibility of successful studies for some students. There are two distinct curricula in the system of vocational education: the curriculum offered in *vocational schools and the one provided in post-secondary technical* schools. Vocational schools provide vocational training for the equivalent of grades ten through twelve. It is also possible to complete additional work in general education at a vocational school and obtain a certificate of general, as well as vocational, education.

Professional secondary schools, the higher level of vocational institutes, have programmes lasting two and a half years for those who have graduated from a programme of upper-secondary education (e.g. gymnasium or vocational school), and four years for those who enter after graduating from basic school.

Both levels of vocational education are often offered in the same building in order to utilize the investment necessary for equipment and maintenance of the building most effectively.

The *Table 8* and *Diagram 7*, 'Enrolment in vocational education 1970-1993' show the changes of enrolment in vocational and post-secondary technical schools.

In the Estonian classification system for education there are different level categories for vocational programmes vocational schools are considered to be at level 3 and post-secondary technical schools are considered to be at level 4. In this paper, both levels of vocational education will be assumed to be equivalent to ISCED level category 3.

The question of who has the right to compete for admission to universities and institutes of applied higher education is crucial. According to the Law on Education, everyone who has a diploma which confirms that he or she has graduated from:

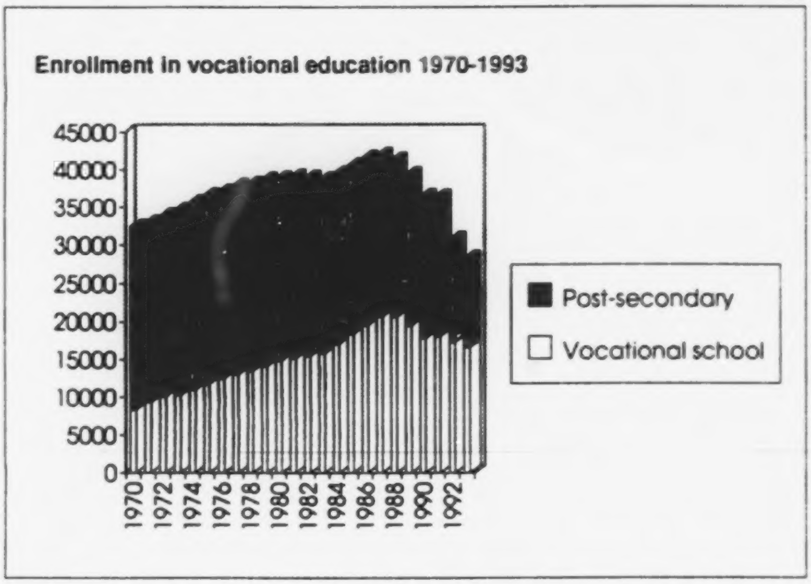
- an upper-secondary general level programme of education;
- a post-secondary technical programme of education;
- a vocational school programme which incorporated general education, has the right to compete for admission to these institutions.

During the last few years new public and private schools for tertiary education have been opened. Most of these new institutions provide programmes leading to advanced professional qualifications, (e.g. maritime education for captains, port managers etc.), although some do offer academic programmes in a limited number of fields.

Table 8. Enrolment in technical and vocational education 1970-1993

Year	Vocational school level	Post-secondary technical level
1970	8331	24079
1971	9340	23627
1972	10071	23811
1973	10332	24295
1974	11075	24585
1975	11767	24826
1976	12488	24608
1977	13095	24803
1978	13502	24583
1979	14169	24498
1980	14899	23900
1981	15196	23807
1982	15503	23369
1983	15864	22778
1984	17055	22390
1985	18364	22193
1986	19549	22026
1987	20602	21359
1988	20627	20637
1989	19428	19915
1990	17826	18623
1991	18058	18337
1992	17261	13426
1993	16629	11579

Diagram 7. Enrolment in vocational education in 1993



2.2. *The vocational education system*

The administration of vocational schools is presently regulated by the Law on Education and a temporary statute. The Law on Vocational Education Schools is in draft mode, and is now being discussed in the Ministry of Culture and Education before being presented to Parliament. Together with social partners, preliminary work is being done to restructure the system of vocational education

Basic school was changed from an eight- to a nine-year programme in 1989, but the average age of basic school graduates is still 15 because the extra year was added to the beginning of the programme. Although it is possible to choose to go to a programme of vocational education once basic training has been completed, the value of a general education which emphasizes academic skills seems to be apparent to young people throughout Estonia. There has been an increase in the percentage of students attending gymnasia. In the 1991/92 school year, 56.2 per cent of students who had completed basic school attended gymnasia. This figure jumped to 66.9 per cent in the 1993/94 school year.

The percentage of basic school graduates entering vocational education has decreased from 33.7 per cent in 1991/92 to 28.3 per cent in 1993/94. Nevertheless, in September, 1993, the total percentage of graduates from the basic level of education who continued studies at gymnasiums or vocational education institutions increased to 95.2 per cent. Detailed data on this phenomenon are given in *Table 22*, and *Table 9*, 'Transition Rates from Basic School to General Upper Secondary and Vocational Education in 1991-1993' and "Transition Rates into Gymnasia (Upper Secondary General Education) and Vocational Education by language".

In the 1993/94 school year one could choose among 83 different institutions offering vocational education. Three of these schools were institutes of applied higher education which also offered vocational training. The number of vocational and secondary professional schools has decreased by 6 since the 1991/92 school year. Three of those schools were changed into institutes of applied higher education. The other three schools were amalgamated with other institutions when the system of education was restructured because they duplicated services which could be offered more effectively in one location.

Under the current system of vocational education, institutions which offer vocational programmes fall under the purview of several government ministries:

Ministry of Culture and Education	3
National School Board	60
Ministry of Internal Affairs	1
Ministry of Social Welfare	1
Farmers' Central Union	1
State Police Department	2
Ministry of Agriculture	12
Municipalities	3

The three schools that are administered by the Ministry of Culture and Education are institutes of applied higher education.

In 1993, the Ministry of Culture and Education created the National School Board. It is the body responsible for administration of the school system, implementation of ministry policy and it has a role in developing new policy and curricula for submission to the Ministry of Culture and Education. In the field of vocational education, the National School Board is responsible for:

- administration (budget, finances, etc.) of the institutions under its purview, and those which are controlled by the Ministry of Culture and Education;
- admissions;
- realisation of system development plans;
- development of national curricula;
- approval of school courses of study, and study programmes;
- inspection of schools;
- supervision of the process of issuing final certificates;
- organisation of research work.

The responsibility for developing educational policy and supervising its implementation lies with the Ministry of Culture and Education.

Other groups which are responsible for vocational schools act independently in matters of school management, but follow the state education policy. Decisions of principle are confirmed by the Ministry of Culture and Education and the National School Board. The school courses of study are registered and approved according to the rules established by those two bodies.

As the Russian-speaking population comprises a substantial minority, either Estonian or Russian can be used as the primary language of instruction throughout the basic and secondary school system. In 1993/94, 53 per cent of vocational schools used Estonian as the only language of instruction. 17 per cent of vocational schools used Russian as the only language of instruction and both languages were used in 30 per cent of schools.

The number of students at vocational schools in 1991/92 was 34,395, of which 63.4 per cent studied in Estonian-language groups. In 1993/94 the total number of students at vocational schools was 28,208, of which 66.8 per cent studied in Estonian-language groups. The increase in the percentage of Estonian-speaking students in vocational schools can be explained by the fact that the percentage of Russian-speaking students admitted to gymnasia has increased more in comparison with that of Estonian-speaking students. This seems to reflect a change of attitude of Russian-speaking students, who formerly used to prefer vocational courses.

Table 9. Transition rates into Gymnasia (Upper Secondary General Education) and vocational Education by language

Year	Language of instruction	Number of basic school graduates	Graduates who went on to gymnasiums (Day school)	Graduates who went on to gymnasiums (Night school)	Graduates who went on to vocational institutions
1992	Estonian	11,324	67.2 per cent	3.2 per cent	32 per cent
1993	Estonian	11,409	71.2 per cent	3.0 per cent	28.2 per cent
1992	Russian	7,002	47.9 per cent	5.6 per cent	25.8 per cent
1993	Russian	6,288	56.3 per cent	4.9 per cent	25.3 per cent

The Estonian system of vocational education has been undergoing a process of restructuring and integration over the past two years. This process has been designed to remove all of the dead-ends that had been present in the Soviet-imposed system of education. The goal of restructuring is to create an articulated, flexible system that will allow students to acquire the highest level of education they are capable of achieving, instead of limiting them because of choices made when they were young.

One of the objectives of the integration process that commenced approximately two years ago, was to decentralize the delivery of vocational education. As a result, it is now possible to establish a system of vocational education which offers programmes that can teach students various levels of skills and can give them a broader base of knowledge.

This change is a radical departure from the imposed Soviet system of education. Estonia's Soviet-designed education system focused on monofunctional training; for example, if a student wanted to work in a factory which made clothes, he or she would be trained to use an industrial type of sewing machine and nothing else.

In the new Estonian system, it is possible to learn how to use an industrial type of sewing machine, but that instruction comprises only one level of a vocational education. Students learning a skill are encouraged to complete several levels of training so that they are able to integrate into a working environment that requires flexibility. They are also encouraged to complete courses in general education so that they have the skills to continue with their education, or open their own business. As a small, independent nation, it is vital to Estonia's future that we train our people to be polyfunctional; to acquire and use a multiplicity of skills. Technical skills must, of course, be reinforced by the development of critical thinking, self-motivation, problem-solving skills and entrepreneurship.

Vocational studies are organised in either 2- or 3-year programmes, depending upon speciality. When combined with general secondary education, programmes take four years to complete. General secondary education is highly valued in Estonia and the number of students in 4-year groups is increasing annually. Students who had graduated from a 4-year programme of vocational studies formed 0.6 per cent in 1992 and increased to 3.9 in 1993, of the total admitted to tertiary educational institutions.

There has been some debate as to whether the proportion of general subjects in the four-year programme allows students to master professional skills and obtain a thorough secondary education. Questions have been raised as to whether the level of general education offered in vocational schools is sufficient, and whether it would not be more practical to offer students an opportunity for further training in practical skills. A general education is a necessity for people to function in modern society, but the type of education that is being offered in the vocational programme needs to be restructured.

Currently, the academic standards used in the vocational programme are those set by the gymnasium. Gymnasium-level academic skills are necessary for those continuing to university, but they are not necessarily of use to participants in the vocational programme. With such a low rate of graduates continuing on to tertiary education, this programme requires careful scrutiny to make sure that it is meeting student and societal needs. The solution may lie in designing an academic programme for vocational schools, instead of attempting to graft an existing programme onto people with unique needs.

Nevertheless, the Estonian four-year programme of vocational education could evolve into an example of the type of educational and vocational system that the Commission of the European Communities recommended should be established. In its *White Paper* on 'Growth, competitiveness and employment: the challenges and the ways forward into the 21st Century', the Commission explained that due to the rapid development of technology and the shift in industrial production away from Europe to the newly industrializing countries, European jobs will be based "*far more on the production, transfer and sharing of knowledge than on the trade in goods; access to theoretical and practical knowledge must necessarily play a major role*". Retraining staff so that they acquire new skills to keep up with technological progress is an essential function of both the public and the private sector.

The vocational system must not be satisfied with training people to perform one function, which will probably be obsolete before their working-life is over. Instead, it must give people a broad base of training and, even more importantly, the general knowledge that will allow them to think analytically and act in a self-sufficient manner when faced with learning new processes at work. Enterprises in Estonia will only be successful if they have a well trained and motivated labour force which is able to solve problems.

The desire for this type of education is apparent. Currently, 81 per cent of the students at vocational schools register for the four-year programme of studies which combines a vocational and a general level of education. This percentage is increasing annually. Unfortunately, there is also a substantial number of those students who do not complete the general academic courses necessary to acquire this degree and opt to graduate with a certificate in vocational education only. In 1993, only 43 per cent of vocational students graduated with a combined degree. We must restructure the programme so that we build upon the initial enthusiasm of those students and provide them with a well-rounded education.

At vocational schools, students study in groups. Groups are formed by specialities and levels. They also take account of the level of the individual's previous education, language of instruction, and status, (e.g. night or correspondence students), into account. In 1993, 78 per cent of the students enrolled in vocational schools (12,979 students) studied in groups based on a background in basic education. There are groups at vocational schools for students who, for various reasons, have not graduated from the basic school. These groups guarantee basic education together with a profession. 12.4 per cent of students at vocational schools study specialities that require general upper secondary education as a prerequisite.

The number of students at a post-secondary technical level of vocational education is 11,579 or 43.5 per cent of the total number of students enrolled in vocational programmes. The average duration of studies for students at that level is 4-5 years. The students in groups based on a background in upper secondary general education numbered 6,547 or 56.5 per cent of the total number of the students enrolled in a vocational programme.

In 1993, there was an average of 1.4 people competing for every space available in the vocational system. The number of admitted students who have practical work experience or who have experienced unemployment has increased. The necessity of acquiring skills is becoming increasingly apparent to young people and those who have been in the workforce. Most students request placement in day, rather than night, classes.

The current condition of Estonia's system of agriculture requires the re-organization of the vocational education system in order to educate and train the rural population and to guarantee work for them in a rapidly changing economy. During the Soviet occupation, schools in the countryside were geared towards producing graduates who would work on state and collective farms. These schools must now be restructured, in order for them to provide agricultural and entrepreneurial training which is suited to managing small, privately-owned farms. They must also be able to supply training in fields other than agriculture, such as light industry, commerce, and services, to help broaden the base of the rural economy. This broadening of focus in rural vocational schools will also reduce the financial burden on parents, who were forced to send their children to towns and cities in Estonia, if the children wanted to learn a trade other than agriculture.

Broadening the scope of vocational programmes in rural areas is not only hampered by lack of funds, however, but by certain administrative obstacles. The Ministry of Culture and Education has expressed the opinion that the administration of the education system should be the responsibility of one ministry. The Ministry of Agriculture would like to maintain authority over the twelve schools currently under its supervision.

What vocational and professional qualifications should the Estonian vocational education system produce? The economy is in the process of being restructured, and the future needs of manufacturers and service industries are uncertain. The new socio-economic situation demands relevant and in-depth knowledge of occupations and entrepreneurial attitudes and expectations. The vocational education system must develop skills which enable students to be flexible, independent and able to participate in the development of firms and society. These are the goals of the working groups carrying out new curricula with the help of Danish educators who are participating in the DEVS (Developing the Estonian Vocational System) project.

3. Monitoring the vocational system

At the present time, education faces new problems and challenges arising from changes in society. It is necessary to identify how education can contribute to helping people adjust to a constantly evolving socio-economic environment.

Effective management and administration of a system of education requires accurate, timely and relevant information. In 1989, in order to ensure that a reliable source of information would be available, the Ministry of Education, in cooperation with Estonian Computing Centre, started to compile statistical databases for education in. The methodology used for gathering, categorizing and analyzing general education statistics was restructured in 1990, when the system was first computerized. By 1991/92 the first edition of a database on vocational education was finished. It was based on the annual statistical report sent to the Ministry by vocational schools each autumn.

Data on programmes chosen by vocational students can be accessed for the past two years. Before 1992, information on vocational programmes was collected manually, and there was a Soviet-designed standard system of categorizing the type of education students received. In 1992, the system of gathering statistics was computerized and vocational programmes were identified according to ISCED classifications. The implementation of this system now allows us to compare information arranged in like categories; however the Soviet-designed system of classification was based on criteria which are not compatible with ISCED classifiers. Comparison of data from the two systems is almost impossible.

Information provided by the new vocational education database includes:

(i) Name, type, address, owner or responsible authority of schools;

(ii) Programmes offered (name, duration, language of instruction, type of programme (i.e. evening, day, and correspondence);

(iii) Planed admission, applications according to level of education, applications according to gender of applicants, admission by gender, educational background of students admitted, number of students admitted with 2 years practical experience;

(iv) Number of students (divided by gender) enrolled in school, programmes, and courses;

(v) Number of students who graduated or left without completing a programme;

(vi) Graduates by level of education attained (including the number of students who earned a certificate of upper-secondary general education before entering a vocational programme);

(vii) Number of students by age and gender;

(viii) Distribution of first-year students by home region.

A database which tracks the personnel in vocational and general education schools was completed during the 1993/94 school year. The second version of this personnel-based database was finished in time for the commencement of the 1994/1995 school year. The information for this database is collected from the anticipated payroll (tarification list) for the pedagogical and administrative staff. The tarification list includes information on :

- Schools, (name, type, address, owner or responsible authority);
- Pedagogical and administrative staff, (name, identification number, education level, higher education institute the person attended, length of teaching service, subject taught, salary earned);

The vocational database does not yet have a classification of teachers by subject, although that classification does exist in the database for general education. We are planning on developing that function in the current version of the vocational database.

The ability to find and create employment often depends upon one's educational background.

Vocational education is closely tied to employment, and the demand for vocational training that is based on the most recent information available is great. We must structure our vocational training so that the cost of establishing and maintaining this system of education is justified by increased employment and a more cohesive society.

In order to better evaluate the situation in vocational education and to show new trends, we are in the process of implementing a system of indicators. It may be premature to make sweeping decisions based on the indicators charted during a period of transition, but they do show some fundamental trends. For example, participation in vocational education (at least in the public sector) is decreasing, and some fields of vocational education, such as health-care, have high drop-out levels, as can be seen in the data compiled in Section 2.3.3.1. Although we can speculate that these trends are caused by factors such as the low salaries offered in the health care field; the full reasons behind these trends must be determined by research done in the fields which are affected by the changes.

These indicators are limited as they are largely based on statistics from public education databases; they do not include participation in retraining and in-service training programmes. We also do not have information on vocational training provided by private enterprise. With the opening-up of the Estonian economy, many multinational firms have established operations in Estonia. They often provide training programmes for their Estonian employees. It is possible that these programmes are making quite a large difference to the statistics for vocational education and training funded by the government. The Statistics Office of Estonia is in the process of compiling figures to track these programmes. Unfortunately, the figures for 1993 will not be ready until the end of this year, and could not be included in this report.

For the purposes of this report, we have divided the indicators into four groups:

- Inputs
- Access and Participation
- Process
- Outcomes

3.1 Inputs

Indicators for inputs, such as educational expenditure relative to GDP, operating expenditures at each level, number of teachers, teachers' quality are described below. Educational expenditure is composed of expenditures for pre-school education, basic schools, gymnasia, vocational schools, professional secondary institutions, institutes of applied higher education, administration and various help services. The expenditure for higher education does not include money spent on research.

3.1.1 Educational expenditure relative to GDP

The gross domestic product (GDP) of Estonia was compiled in accordance with recommendations made in the United Nations' "Revised system of National Accounts" for 1991 and 1992. This is the first time Estonia's GDP has been compiled using these criteria, so some minor inaccuracies may be present.

Definition

The indicator, "educational expenditure relative to GDP", shows the magnitude of total educational expenditure and also charts some specified components of educational expenditure as a percentage of GDP.

For 1991, the educational expenditure relative to GDP was 4.0 per cent, for 1992 it was 5.6 per cent, and for 1993, it was counted as 5.3 per cent. (Statistical Office of Estonia, 1992,1993).

Table 10. Percentage of GDP spent on specific levels of education

Country	Primary and secondary education	Tertiary education	All primary, secondary and tertiary education	All levels combined (including early childhood education and undistributed funds)	Vocational education
Estonia*	3.1%	1.0%	4.1%	5.6%	0.8%
OECD: Country mean**	4.0%	1.5%	5.4%	6.1%	
Hungary**	4.6%	1.0%	5.6%	6.7%	
Ireland**	3.7%	1.4%	5.3%	5.9%	

Source: * Statistical Office of Estonia, 1992.
** Indicator P1 (1991), OECD.

The Estonian figures for "Percentage of GDP spent on specific levels of education GDP" *Table 10,* have been compared to those of Ireland because the percentage of population aged 5 to 29 is very similar in both countries (see table below). Hungary was chosen as a point of comparison, even though it has a low percentage of its population between the ages of 5 to 29, because it is a Central-European nation that has also had a planned economy and has instituted a programme of reform to a market economy.

Table 11. The relative size of the young population

Country	Population aged 5-29
Estonia*	43.0 %
OECD: Country mean**	36.8 %
Hungary**	34.5 %
Ireland**	43.1 %

Source: * Satistical office of Estonia, 1991.
** OCED Indicator C1, 1991.

3.1.2 *Public expenditure for education as percentage of total expenditure*

Definition

This indicator expresses public expenditures on education as percentage of the total public spending for all purposes.

Table 12. Public expenditure on education in the national budget

Country	1992	1993	1994
Estonia*	14 %	14.8 %	15.0 % (anticipated)
OECD: Country mean**	12.8 % (1991)		

Source: * *Ministry of Finance, 1992, 1993, 1994*
** *OECD Indicator P2, 1991*

Table 13, 'Public expenditures', shows the expenditures that national and local governments made on education in 1992. (Statistical Office of Estonia).

Table 13. Public expenditure in 1992

	State budget		Local budgets		Total	
		%		%		%
A. Finance of social sphere	730322	45%	651061	51%	1381383	48%
of which						
education	234563	14%	537577	42%	772140	27%
culture and art	98387	6%	55517	4%	153904	5%
public health	84471	5%	13799	1%	98270	3%
sports	14086	1%	12078	1%	26164	1%
social security	298815	18%	32090	2%	330905	11%
B. Science	60840	4%		<1%	60840	2%
C. Finance of national economy	388390	24%	442077	34%	830467	29%
of which						
housing and communal economy	9442	1%	326261	25%	335703	12%
agriculture	212435	13%	6243	<1%	218678	8%
transport	146179	9%	96095	7%	242274	8%
environmentalism	11224	1%	821	<1%	12045	<1%
other branches	9110	1%	12657	1%	21767	1%
D. Administration expenditure	120411	7%	95412	7%	215823	7%
E. Legal protection expenditure	54717	3%		<1%	54717	2%
F. Keeping of public order expenditure	140473	9%	30611	2%	171084	6%
G. State defence expenditure	61055	4%		<1%	61055	2%
H. Provision of foreign currency	150	<1%	305	<1%	455	<1%
I. Return of bank loans	1710	<1%	7220	1%	8930	<1%
J. Election expenditure	8583	1%	5	<1%	8588	<1%
K. Other expenditure	51519	3%	59088	5%	110607	4%
Total outlay	1618170	100%	1285779	100%	2903949	100%

Source : Statistical Office of Estonia.

3.1.3 Educational expenditure by level of education

In Estonian statistics, the figures on expenditure for the basic and secondary levels of general education are combined. It is impossible to clearly separate the funds used on each level of education because basic and secondary schools are often housed in the same building. Although it is possible to determine how much is spent on teachers' salaries at each level, costs such as maintenance, supplies and repairs are indivisible. *Table 14*, and *Diagram 8*, show public expenditures by level of education in 1992.

The funds dedicated to vocational schools in Estonia in 1993 were divided among these sectors:

Teaching and administration staff	51.7 per cent
Operational costs	22.6 per cent
Stipends	19.3 per cent
Repairs	3.8 per cent
Inventory	1.3 per cent
Training	1.0 per cent
Miscellaneous	0.3 per cent

It is frequently not possible to provide a relevant vocational education in the public system as the funds needed to obtain the necessary equipment do not exist. Cuts have been made in the budget in order to try and restructure spending, but the amount of money that can be obtained from these cuts is limited. Stipends have been almost eliminated in the budget for 1994, but some costs are fixed on a short-term basis. For example, more than half of operational costs are designated for heating large and poorly-designed school complexes. In order to reduce those costs there must be a large capital outlay on building improvements, such as insulation, improved heat exchangers, and structural repairs. In rural areas, vocational institutions must also provide housing for the teachers as an incentive. Other costs such as inventory, repairs, and training are artificially low at the moment, because there is no money to be spent on them.

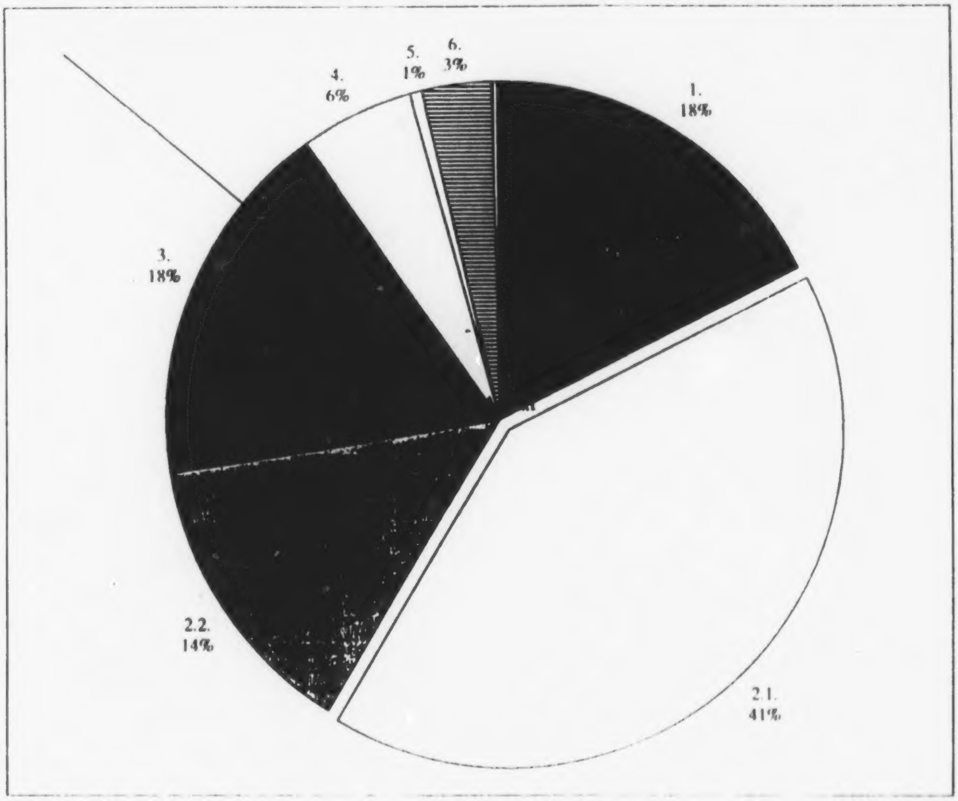
The largest portion (51.7 per cent) of the budget for vocational education is spent on salaries for teachers and administrative staff. It is difficult, however, to see how this figure could be efficaciously reduced. The student/teacher ratio in Estonia's vocational institutions is in keeping with that of Denmark, a successful member of the European Community and a major partner in Estonia's process of reform. Teachers' salaries are below the national average, (c.f. *Section 1.4* and *Table 4*), a fact which is already making it difficult to find qualified people to work in education. There is no possibility of any further reduction in teachers' salaries.

A total of 853,805,000 EEK (19.5%) of the national budget will be spent on education in 1994. 92 per cent of that sum is administered by the Ministry of Culture and Education, and the remainder is under the control of other Ministries who are the responsible authorities for some schools (e.g. Ministry of Agriculture; c.f. section 2.2.2. for a complete list). The Ministry plans to spend 18.7 per cent (146,888,610 EEK). of its allocation on vocational education, which is more than the percentage indicated on *Table 13*, (which was lower than that allocated to pre-primary education). *(Ministry of Culture and Education).*

Table 14. Public expenditure by level of education in 1992

Level and type education	**Current expenditure**		**Capital expenditure**		**Total expenditure**	
		%		**%**		**%**
1. Preceding the first level (pre-primary)	136531	19%	4283	7%	140814	18%
2. First and second level	406801	56%	30210	46%	437011	55%
2.1. a) general	304223	42%	22605	34%	326828	41%
2.2. b) vocational education	102578	14%	7605	12%	110183	14%
3. Third level (higher)	115988	16%	23455	36%	139443	18%
4. Special education	40858	6%	3852	6%	44710	6%
5. Literacy and adult education	4126	1%	498	1%	4624	1%
6. Other types of education	22917	3%	3300	5%	26217	3%
7. Expenditure not distributed	1378	0%	221	0%	1599	0%
Total	728599	100%	65819	100%	794418	100%

Diagram 8. Distribution of public education expenditure by level of education



1. Preceding the first level (pre-primary)
2.1. a) general
2.2. b) vocational education
3. Third level (higher)
4. Special education
5. Literacy and adult education
6. Other types of education

3.1.4. Expenditure per student in national currency for general and vocational education

Definition

Expenditure per student in national currency is calculated by dividing total expenditure for education at a given level by the number of full-time students enrolled at the same level.

The average cost per student in vocational education covers a wide range of vocations depending of the area of training.

The amount spent on students enrolled in general and vocational education programmes at schools administered by the Ministry of Culture and Education and the National School Board, is outlined in *Table 15.*

Table 15. Educational expenditure per tudent (Figures given in national currency,(EEK = 1 DM)

Year	General education	Vocational education
1992	2,569 EEK	3,591 EEK
1993		5,937 EEK
1994		5,937 EEK

Source: Ministry of Culture and Education.

The difference in cost between vocational education and general education is not as great as in other countries, as a result of the limited expenditure on supplies and teaching materials.

3.1.5. Student/teacher ratio in vocational education (1993/94)

This ratio is based on teachers and students of vocational institutions which are under the direct authority of the Ministry of Culture and Education and the National School Board. In vocational education, the student/teacher ratio varies somewhat according to the type of school.

Table 16. Student/teacher ratio in vocational schools

Year	Student/teacher ratio in vocational education	Student/teacher+ vocational trainer ratio
1992/1993	12:1	
1993/1994	12:1	8:1

Table 17. Pedagogical staff by gender and age

	Total	Women					
	W+M	under 25	25-29	30-39	40-49	50-55	over 56
1. teachers	**1452**	**3%**	**6%**	**20%**	**22%**	**12%**	**11%**
1.1 full-time teachers	1073	3%	6%	21%	22%	13%	12%
of whom							
1.11 general subjects	463	2%	6%	23%	25%	13%	14%
1.12 special subjects	610	3%	5%	19%	20%	13%	11%
1.2 part-time teachers	379	2%	6%	19%	21%	11%	9%
2. vocational trainers	**689**	**2%**	**7%**	**16%**	**16%**	**8%**	**3%**
3. other pedagogical staff	**446**	**2%**	**4%**	**15%**	**21%**	**11%**	**9%**
3.1 headmaster,primary school principal	57	0%	0%	4%	7%	11%	2%
3.2 assistant headmaster	92	0%	0%	8%	20%	13%	2%
3.3 Dept. heads	151	1%	3%	13%	26%	9%	7%
3.4 supervisors	66	5%	6%	17%	23%	12%	26%
3.41 boarding school	66	5%	6%	17%	23%	12%	26%
3.5 psychologist	3	0%	0%	67%	33%	0%	0%
3.6 librarian	50	6%	12%	30%	18%	12%	20%
3.7 extra curricula act.leader	16	6%	19%	6%	19%	13%	13%
3.8 specialist in methods	11	0%	9%	73%	18%	0%	0%

Table 18. Pedagogical staff by gender and age

	Total	Men					
	W+M	under 25	25-29	30-39	40-49	50-55	over 56
1. teachers	**1452**	**1%**	**2%**	**5%**	**7%**	**7%**	**4%**
1.1 full-time teachers	1073	1%	2%	4%	7%	6%	4%
of whom							
1.11 general subjects	463	1%	1%	3%	4%	4%	2%
1.12 special subjects	610	1%	2%	4%	9%	8%	5%
1.2 part-time teachers	379	2%	3%	8%	6%	9%	4%
2. vocational trainers	**689**	**3%**	**4%**	**14%**	**12%**	**11%**	**5%**
3. other pedagogical staff	**446**	**0%**	**2%**	**9%**	**11%**	**14%**	**3%**
3.1 headmaster,primary							
school principal	57	0%	5%	9%	23%	37%	4%
3.2 assistant headmaster	92	1%	2%	13%	18%	20%	3%
3.3 Dept. heads	151	1%	3%	12%	10%	11%	5%
3.4 supervisors	66	0%	2%	3%	3%	5%	0%
3.41 boarding school	66	0%	2%	3%	3%	5%	0%
3.5 psychologist	3	0%	0%	0%	0%	0%	0%
3.6 librarian	50	0%	0%	0%	0%	2%	0%
3.7 extra curricula act.leader	16	0%	0%	6%	0%	19%	0%
3.8 specialist in methods	11	0%	0%	0%	0%	0%	0%

Table 19. Pedagogical staff according to educational background in 1993/94

	Total	Higher				Professional-secondary				Secondary
		Professional		Non-professional		Professional		Non-professional		
		Pedagogical	Other	Pedagogical	Other	Pedagogical	Other	Pedagogical	Other	
1. teachers	**1452**	**53%**	**25%**	**3%**	**3%**	**4%**	**7%**	**0%**	**1%**	**4%**
1.1 full-time teachers	1073	59%	20%	3%	3%	4%	6%	0%	1%	4%
of whom										
1.11 general subjects	463	76%	5%	5%	5%	2%	1%	0%	2%	4%
1.12 special subjects	610	47%	31%	2%	2%	5%	9%	0%	1%	3%
1.2 part-time teachers	379	34%	39%	3%	3%	3%	12%	1%	1%	4%
2. vocational trainers	**689**	**6%**	**14%**	**2%**	**5%**	**9%**	**35%**	**0%**	**9%**	**20%**
3. other pedagogical staff	**446**	**35%**	**23%**	**6%**	**5%**	**4%**	**9%**	**2%**	**4%**	**11%**
3.1 headmaster,primary school principal	57	56%	33%	2%	4%	0%	4%	0%	2%	0%
3.2 assistant headmaster	92	34%	32%	7%	7%	1%	9%	2%	4%	5%
3.3 Dept.	151	41%	28%	3%	5%	4%	9%	1%	3%	6%
3.4 supervisors	66	17%	0%	11%	6%	18%	5%	6%	17%	21%
3.41 boarding school	66	17%	0%	11%	6%	18%	5%	6%	17%	21%
3.5 psychologist	3	67%	33%	0%	0%	0%	0%	0%	0%	0%
3.6 librarian	50	22%	18%	10%	2%	0%	18%	4%	0%	26%
3.7 extra curricula act.leader	16	13%	6%	6%	6%	6%	6%	6%	0%	50%
3.8 specialist in methods	11	64%	9%	9%	9%		9%	0%	0%	0%

Table 20. Pedagogical staff by length of teaching service

	Total	service	Length of teaching service (in years)				
		0-2	2-5	5-8	8-11	11-15	over 15
1. teachers	1452	9%	6%	7%	8%	12%	**59%**
1.1 full-time teachers	1073	8%	6%	7%	9%	12%	**60%**
of whom							
1.11 general subjects	463	8%	5%	8%	11%	14%	54%
1.12 special subjects	610	8%	6%	5%	7%	10%	64%
1.2 part-time teachers	379	11%	8%	7%	6%	11%	57%
2. vocational trainers	**689**	**12%**	**13%**	**11%**	**10%**	**13%**	**41%**
3. other pedagogical staff	**446**	**12%**	**8%**	**6%**	**7%**	**9%**	**59%**
3.1 headmaster, primary school principal	57	2%	4%	2%	5%	11%	77%
3.2 assistant headmaster	92	14%	5%	2%	9%	8%	62%
3.3 Dept.heads	151	9%	7%	7%	5%	9%	63%
3.4 supervisors	66	9%	15%	12%	6%	8%	50%
3.41 boarding school	66	9%	15%	12%	6%	8%	50%
3.5 psychologist	3	33%	0%	33%	0%	0%	33%
3.6 librarian	50	32%	14%	4%	6%	14%	30%
3.7 extra curricula act.leader	16	6%	13%	6%	6%	13%	56%
3.8 specialist in methods	11	0%	0%	9%	27%	0%	64%

The ratio of students and teachers in Estonia's vocational schools is in keeping with that of Denmark, one of Estonia's major partners in the process of curriculum development for vocational schools. In 1991/92, the Danish student/teacher ratio in commercial schools was 12.4:1; in technical schools it was 8.9:1. (Facts and Figures, Education Indicators, Denmark).

3.1.6. Pedagogical staff of vocational education institutions by educational background and length of teaching service (1993/94)

Teachers in the vocational education system can be separated into three main groups:

- General subject teachers
- Special subject teachers
- Vocational trainers

The differences between the three groups can be seen in *Tables 17, 18, 19* and *20* which show:

- Pedagogical Staff by Gender and Age (1993/94);
- Pedagogical Staff According to Educational Background (1993/94);
- Pedagogical Staff by Length of Teaching Service (1993/94)

A total of 74 per cent of teachers in the vocational education system are women. The proportion of women among general subject teachers is very high than average (85 per cent). The percentage of men among vocational subject teachers is a little higher (29 per cent). It is interesting to mention that school principals cent are 78 per cent men and nearly half of them are over 50 years of age. In Estonia headmasters in general education are younger, only 37.8 per cent of them are over 50. Out of principals in the VET system, 77 per cent have more than 15 years of teaching service. It is the highest percentage of all pedagogical staff. General subject teachers' education levels are usually higher than those of special subject teachers. Only 31 per cent of special subject teachers have tertiary-level professional education and only 47 per cent have tertiary-level pedagogical education. 76 per cent of general subject teachers have tertiary level pedagogical education and 5 per cent have some other type of tertiary education.

We cannot accurately compare the percentage of teachers who have tertiary-level pedagogical education now with the percentage who had tertiary-level pedagogical education in the past. In earlier figures, tertiary-level pedagogical education was not separated from all tertiary level studies, as it is in our current database.

A serious problem exists concerning the level of education of teachers in the vocational system. The number of teachers with no professional training at all has increased during the last few years. The proportion of young teachers less than 30 years of age is only 10 per cent, while the proportion of teachers nearing retiriment and older is 16 per cent. One reason why young people who graduated as teachers are not teaching is the low level of salary. Although the Ministry of Culture and Education has attempted to increase teachers' salaries over the past two years, it has not been able to keep up with the rate of inflation. As *Diagrams 4* and *5*, (Indexes of wages in relation to the average gross wages, 1992 and 1993), and *Table 4*, in *Section 1.4* indicate, the index of wages for education has actually decreased.

People working in education are now earning salaries well below the national average. As a result, people who have been trained in pedagogy often go to work in private enterprises, because the private sector offers much higher salaries. This is one factor which causes a 'brain drain' from the education sector. Schools are now forced to employ people without adequate training.

One of the problems in the vocational education system is the training of vocational trainers and also teachers of special subjects. A system of qualifying vocational trainers and special subject teachers in pedagogical skills is not yet fully operational.

3.1.7 Location and size of vocational and post-secondary technical schools according to Administrative Units (1993/94)

Table 21, contains data about enrollment in vocational and secondary professional schools by location. It does not contain the enrolment for institutes of applied higher education.

The average number of students per school is largest in highly industrialized areas such as Tallinn, Kohtla-Järve and Sillamäe. This distribution of students is a result of policies implemented under the Soviet-imposed system of education. In 1980-1989, a policy of building large, centralized, vocational schools to train the majority of workers going into a given industry was implemented. Vocational institutions were largely established in regions based on the contribution that established industries in the area made to Estonia's GDP. At the time, this policy was thought to be economically sound as it would necessitate less capital investment in school buildings and equipment, but it also institutionalized regional inequalities.

It is unlikely that areas of Estonia which do not already have a flourishing industrial base will develop one if centralized vocational institutions are not restructured. It is extremely expensive for people living in rural areas to send their children to cities to be educated. The additional costs of educating a child, such as food and shelter and transportation, increasingly preclude children in rural areas from coming to a centralized location to get vocational training.

Another disadvantage of centralized vocational training is that it encourages youth to leave rural areas and settle in cities. 70.3 per cent of Estonia's population currently lives in urban centres; the system of education should not be structured so that it encourages this trend.

Tallinn educated 38 per cent of all students enrolled in vocational programmes and produced 50 per cent of all graduates in vocational education in 1993/94. Tallinn, Kohtla-Järve, Narva, Tartu, Harjumaa, and Ida-Virumaa produced 74 per cent of all graduates of vocational education that year. If Estonia hopes to have a society without the huge regional disparities, the vocational system must be restructured in order to provide more opportunities for those living in rural areas and to encourage the development of new enterprises as a stimulus to regional economies.

Table 21. Number of vocational education institutions, admission, students and graduates by administrative units in 1993/1994

Administrative unit	Vocational education institutions	Average number of students per school	Admission				Students				Graduates			
			Total dept.	Day dept.	Evening dept.	Correspondence dept.	Total dept.	Day dept.	Evening dept.	Correspondence dept.	Total	Day dept.	Evening dept.	Correspondence dept.
Republic total	**80**	**336**	**10974**	**95%**	**1%**	**4%**	**26843**	**93%**	**1%**	**6%**	**10143**	**91%**	**1%**	**8%**
Tallinn	23	446	39%	93%	0%	7%	38%	91%	1%	8%	50%	89%	1%	10%
Kohtla-Järve	3	420	4%	83%	17%	0%	5%	82%	8%	10%	4%	71%	8%	21%
Narva	4	339	5%	100%	0%	0%	5%	100%	0%	0%	4%	100%	0%	0%
Pärnu	3	261	2%	100%	0%	0%	3%	100%	0%	0%	2%	100%	0%	0%
Sillamäe	1	530	2%	100%	0%	0%	2%	100%	0%	0%	2%	100%	0%	0%
Tartu	7	347	10%	100%	0%	0%	9%	100%	0%	0%	8%	97%	3%	0%
Harjumaa	2	283	4%	100%	0%	0%	2%	100%	0%	0%	4%	100%	0%	0%
Hiiumaa	1	105	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%
Ida-Virumaa	2	653	5%	100%	0%	0%	5%	100%	0%	0%	4%	100%	0%	0%
Jõgevamaa	3	309	3%	95%	5%	0%	3%	92%	0%	8%	2%	85%	8%	7%
Järvamaa	3	306	3%	100%	0%	0%	3%	100%	0%	0%	3%	100%	0%	0%
Lääne-Virumaa	4	295	4%	87%	0%	13%	4%	88%	0%	12%	3%	88%	0%	12%
Läänemaa	1	212	1%	100%	0%	0%	1%	100%	0%	0%	0%	100%	0%	0%
Põlvamaa	2	188	1%	63%	0%	37%	1%	69%	0%	31%	1%	70%	0%	30%
Pärnumaa	3	217	4%	100%	0%	0%	2%	90%	0%	10%	3%	85%	0%	15%
Raplamaa	3	224	2%	100%	0%	0%	3%	100%	0%	0%	1%	100%	0%	0%
Saaremaa	2	180	1%	100%	0%	0%	1%	100%	0%	0%	1%	100%	0%	0%
Tartumaa	2	101	1%	100%	0%	0%	1%	100%	0%	0%	1%	100%	0%	0%
Valgamaa	2	220	1%	100%	0%	0%	2%	100%	0%	0%	1%	100%	0%	0%
Viljandimaa	6	209	4%	93%	0%	7%	5%	95%	0%	5%	3%	88%	0%	12%
Võrumaa	3	349	3%	83%	0%	17%	4%	78%	0%	22%	2%	80%	0%	20%

Excluded are non-university type educational institutions and their students

3.2 Access and Participation

3.2.1 Transition of graduates from basic school to general upper secondary ducation and Vocational Education

Definition

These percentages show the proportion of basic school graduates who are proceeding with their studies in gymnasia, vocational schools and post-secondary technical schools.

Table 22. Transition Rates from Basic School to General Upper Secondary and Vocational Education in 1991-1993

		1970	1975	1980	1985	1991	1992	1993
Upper secondary general education	Total	61.7	68.1	64.6	57.1	56.2%	62.3 %	66.9 %
	Day classes	53.0	55.3	57.7	53.5		57.6 %	62.1 %
	Evening classes	8.7	12.9	6.9	3.6		4.7 %	4.8 %
Vocational education	Total	21.7	26.2	32.6	31.7	33.7 %	30.6 %	28.3 %
	Vocational	4.7	10.8	17.6	26.2	25.1 %	25.2 %	22.7 %
	Post-secondary technical Professional	17.0	15.4	15.9	15.5	8.6 %	5.4 %	5.6 %
Total transition rate to upper secondary education		83.4	94.3	97.2	88.8	89.9 %	92.9 %	95.2%

General upper secondary education has always been highly valued in Estonia. During the Soviet occupation the balance between general upper secondary and vocational education was centrally determined. Enrolment in upper secondary general education has steadily increased over the past three years while the percentage of students continuing in vocational education has declined. The reasons for this trend are, as yet, undefined. While it is true that many basic school graduates are interested in acquiring the highest level of education possible, it is impossible to say how many students who would normally have gone into publicly-funded vocational programmes are now being trained by private enterprises.

As was shown in *Table 9*, Section 2.2.2, the rate of Estonian-language basic school graduates admitted to general upper secondary schools, increased from 70.4 per cent to 74.2 per cent from 1992 to 1993; the rate of Russian-language basic school graduates increased from 53.5 per cent to 61.2 per cent. The majority of basic school graduates who live in urban areas proceed with studies in upper secondary general education. This percentage is particularly high among women living in urban areas.

Data on transition rates by language of instruction shows that the number of Estonian-language basic school graduates who proceed with their studies in upper secondary general education, outnumbers that of Russian-language school graduates. The reason for this disparity is uncertain, as upper secondary general instruction is made available in both languages.

Table 23. Transition rates to upper secondary general schools (Gymnasia), 1993

Urban area	Total transition rate from basic to upper secondary general education			Transition rate to estonian-language upper secondary general education			Transition rate to russian-language upper secondary general education		
	Total	Women	Men	Total	Women	Men	Total	Women	Men
Tallinn	68%	77%	58%	83%	91%	75%	55%	66%	43%
Kohtla-Järve	44%	54%	31%	81%	83%	78%	39%	50%	23%
Narva	55%	62%	47%	77%	89%	50%	54%	62%	47%
Pärnu	87%	100%	70%	87%	102%•	66%	86%	92%	80%
Sillamäe	56%	66%	46%				56%	66%	46%
Tartu	94%	102%•	86%	98%	106%•	88%	84%	91%	76%
Other regions	41%	43%	39%						

- • *Figures of more than 100 per cent indicate that basic school graduates from rural regions have continued with their studies in urban schools.*

The official transition rate from basic to upper secondary general education in "other regions" is 41 per cent. In reality the percentage is even higher, as the statistics which are available track basic school graduates within their home regions only. When basic school graduates from rural areas proceed with their studies in a town nearby, the transition rate in the town increases artificially and decreases in the rural region. This effect is especially evident in figures for cities such as Tartu, which has a transition rate of 102 per cent for female students going into upper secondary general education as a result of additional students coming from rural areas to continue their studies.

If the tendency to continue studies at an upper secondary general level of education continues, vocational education planning, especially in urban centres, will have to be restructured. The emphasis should then be placed on training students who already have general secondary education, which means training them at post-secondary level. The duration of studies at vocational education institutions would become shorter if an increasing number of students had upper secondary general education, because the proportion of general subjects in the vocational curriculum would decrease.

Table 24. Transition of graduates from upper secondary general schools to vocational and tertiary education

		1991	1992	1993
Tertiary education	Total	23.7%	29.3[2]%	30.5%
	Universities	23.7%	22.4%	21.3%
	Institutes of Applied Higher Education		7.6%	9.2%
Vocational education	Total		24.9%	22.8%
	Vocational		10.3%	9.5%
	Post-secondary technical	18.1%	15.6%	13.3%
Total transition			53.8%	53.3%

Although the figures show that programmes at the institutes of applied higher education are attracting an increasing percentage of the students graduating from upper secondary general education, the total percentage of upper secondary general graduates continuing their education seems to be decreasing. Once again, it is difficult to determine the accuracy of these figures because the transition rates into programmes organised by private companies and non-governmental organisations are not known.

3.2.2. Participation in formal education

Definition

Participation in formal education measures the number of students who are enrolled at each level of education (except early childhood education) per 100 persons in the population who are 5-29 years age. Children enrolled in special education are included. Figures for Estonia's participation are outlined in *Table 25, Diagrams 9* and *10*.

Among people aged 5 to 29, there was a higher than 50 per cent rate of participation in formal education during academic years 1990/91 and 1991/92. Since 1992/93 the participation rate has dropped to less than 50 per cent. From the indicator for the "Relative Size of the Young Population in Estonia" (*Diagram 1, Section 1.1*) we can see that, on the one hand, the percentage of the population aged 5 to 14 has remained the same from 1991-1994, but, on the other hand, we know that participation in formal education at the basic level decreased from 34.4 per cent in 1991 to 33.8 per cent in 1994 (*Table 25*).. There are some problems in the enforcement of compulsory basic school attendance, but we cannot be certain that the full 0.6 per cent drop in attendance is caused by drop-outs from basic school. For example, the minimum age for basic school attendance was changed from 6 to 7 in 1993. This may account for some of the decline in participation. Other factors, such as the distribution of children in the 5 to 14 age group would have to be taken into account to determine why the decline in participation has occurred. In 1992/93 1.6 per cent of the total number of students enrolled in basic school dropped-out; in 1993/94, 1.5 per cent of basic school students dropped-out.

Table 25. Participation in formal education from 1991 - 1994

Definition

Participation in formal education measures the number of students who are enrolled at each level of education (except early childhood education) per 100 persons in the population who are 5 - 29 years of age. Children in special education are in principle included.

Year	Primary and lower secondary education	Upper secondary education			Tertiary education
		Total	general	vocational	
91	34,4	12,2	5,7	6,5	4,6
92	34,3	11,6	5,4	6,2	4,6
93	34,0	11,1	5,5	5,7	4,5
94	33,8	11,0	5,8	5,2	4,7

Diagram 9. Participation rate by level of education

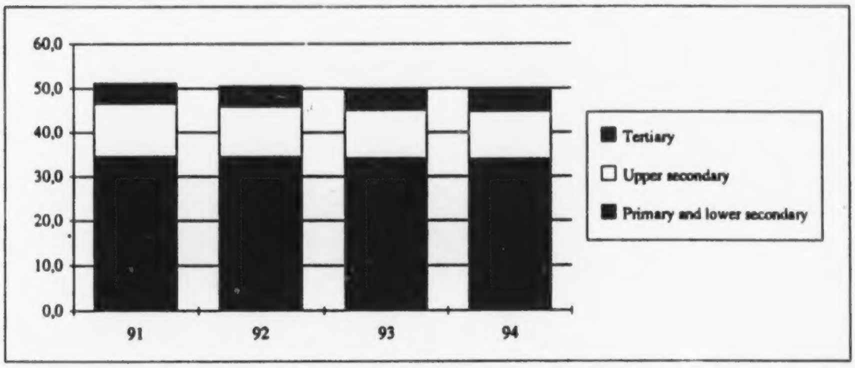
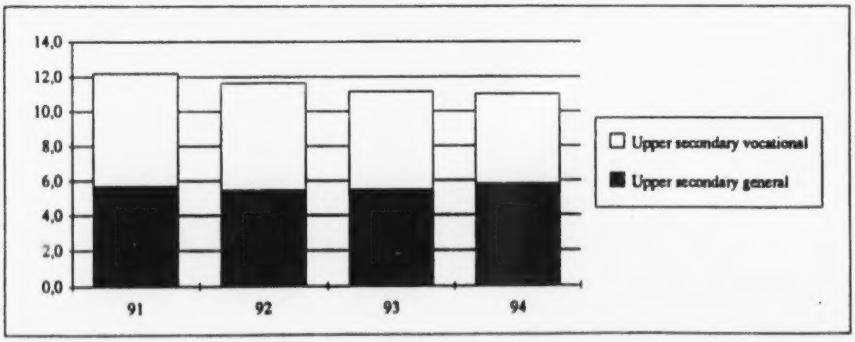


Diagram 10. Distribution of the upper secondary participation rate by type of education



3.2.3. Net enrolment rates in all types of secondary education

Definition

The net enrollment rates for secondary education consist of the percentage of the population in a single age group, enroled in a full-time programme of secondary education.

Table 26 "Net Enrolment in all secondary education, 1993/94": shows the proportion of students in each age group enrolled in general and vocational programmes of education. The level of participation in upper secondary general education among people aged 15 to 18 increased in 1994.

Changes in the proportions of students enrolled in programmes of upper secondary general education and those enrolled in vocational programmes are shown in *Table 27*, "Upper Secondary Education from 1991-1994," and *Diagrams 11* and *12*.

One can see that the proportion of students taking programmes at an upper secondary general level has increased. The proportion of students in vocational education institutions, especially at post-secondary technical education level is on the decrease. The decrease in enrolment at a post-secondary technical level was planned at the end of the eighties, because vocational programmes were qualifying an unreasonably high number of trained technicians (e.g. mining and metallurgical engineers) as opposed to skilled workers (e.g. workers for industry and construction). The number of students admitted to post-secondary technical schools on the basis of a compulsory 9-year education was also limited. This decision was made because it was found that students who entered post-secondary technical education immediately after basic school, often did not have the maturity to cope with managerial duties. In the last years, three post-secondary technical schools were changed into institutes of applied higher education, so this too os one reasons for the decrease in enrolment of secondary education as the student are now enrolled in tertiary education. The database lacks of information about three private post-secondary technical schools.

Another possible factor behind the increased enrolment in upper secondary general education may be availability. The vocational education system is not as well established as that of upper secondary general education. Students may choose to embark upon a programme of upper secondary general education because it is cheaper to study at a general secondary school close to home than to go to another city or region to a vocational school. It is also difficult for students to choose a profession at this time, because they are uncertain as to what occupations will be needed in Estonia's future development, and graduates of upper secondary general programmes are perceived to have a higher social status than graduates of vocational programmes.

3.2.4. Proportion admitted by fields of education

Standards are st to determine who will be admitted to upper secondary general and vocational programmes. These standards are determined by individual schools and programmes. Marks given by the student's previous school are the basis for enrolment to a vocational school, but successful completion of specially set exams is a necessity for admission to secondary professional schools.

Table 26. Net enrolment rates in secondary education

	Age							
	14	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Population 01.01.1993								
Total	21470	21574	21615	21207	20936	20952	21683	21615
General education enrol.	20022	15476	11955	8186	1531	565	344	300
%	93%	72%	55%	39%	7%	3%	2%	1%
Vocational education enorl.	233	4534	5763	6008	4720	2711	1595	900
%	1%	21%	27%	28%	23%	13%	7%	4%
Secondary education total enrol.	20255	20010	17718	14194	6251	3276	1939	1200
%	94%	93%	82%	67%	30%	16%	9%	6%
Population 01.01.1994								
Total	21115	21171	21313	21321	21000	20797	20787	21537
General education enrol.	19168	15965	12520	8470	1416	564	240	
%	*91%*	*75%*	*59%*	*40%*	*7%*	*3%*	*1%*	*0%*
Vocational education enrol.	293	3900	5341	5613	4508	2977	1506	1000
%	*1%*	*18%*	*25%*	*26%*	*21%*	*14%*	*7%*	*5%*
Secondary educ. total enrol.	19461	19865	17861	14083	5924	3541	1746	1000
%	*92%*	*94%*	*84%*	*66%*	*28%*	*17%*	*8%*	*5%*

Table 27. Upper secondary education from 1991 - 1994

Precentage of upper secondary students enrolled in general and vocational education (including technical education)

Year	Total	General education		Vocational education					
			%	Total	%	Vocational school	%	Technical school	%
91	68092	31643	46%	36449	54%	17826	26%	18623	27%
92	64392	29997	47%	34395	53%	18058	28%	16337	25%
93	60048	29361	49%	30687	51%	17261	29%	13426	22%
94	59008	30800	52%	28208	48%	16629	28%	11579	20%

Diagram 11. Distribution of upper secondary students by type of education

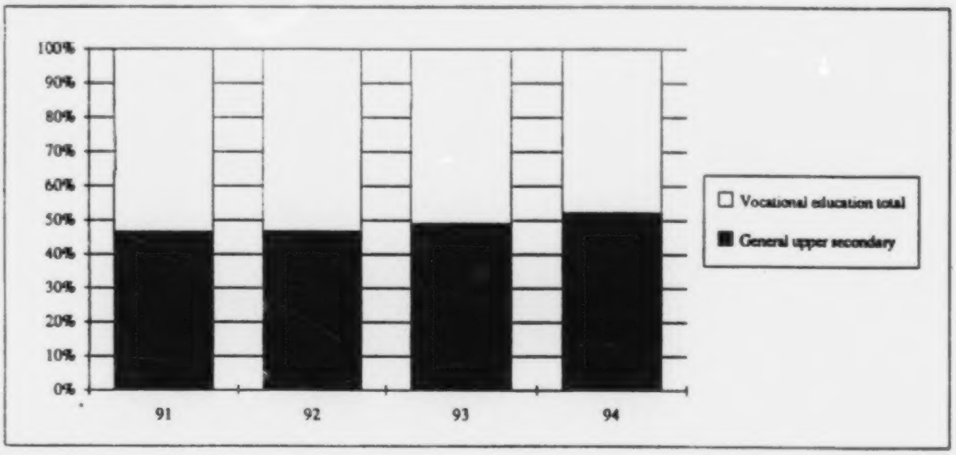
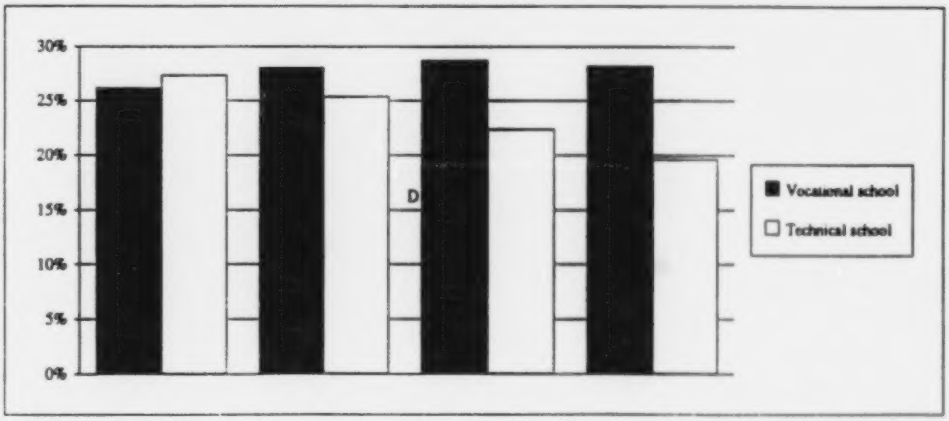


Diagram 12. Distrubution of upper secondary students by tupe of vocational institution



Tables 28 and *29* give data about the number of applicants and the rate of admission. In tables "With contract" means agreement with an enterprise which offer a job after completion of studies. In vocational schools the most popular fields of study are:

- Food service and tourism (e.g. chefs, hotel receptionists);
- Trade and business (e.g. secretaries, bank tellers, shop assistants);
- Home economics.

At the post-secondary level of education the most popular fields of study are:

- Trade and business (e.g. bookkeeping, data clerks, managers);
- Food service and tourism (e.g. restaurant managers, travel agents);
- Paralegal studies.

Home economics is extremely popular among young women in the rural areas of Estonia, but the other reason can be that there is no choice for girls. There is a need for further research to determine what fields of study will be attractive to and beneficial for students in rural areas.

According to the Labour Board, the types of training that are presently most in demand on the job market are:

- Services (e.g. hotel, restaurant);
- Commerce (e.g. wholesalers and retailers, advertising, sales agents);
- Food processing (e.g. using new technology in the food industry);
- Light industry (e.g. using and maintaining new technology);
- Construction (e.g. knowledge of new building techniques, tools and materials).

Source: Labour Board, Information Bulletin No. 2

The restructuring of vocational education according to the new economic requirements has not yet taken place. Teachers still try to teach the students as they used to do with their old qualifications and equipment. Of course, with lack of funds it is almost impossible to organise teachers retraining and obtain up to date equipment for training. The rates of admission show that students are motivated to learn even under poor teaching condition.

Table 28. Rates of admission by fields of education in 1993/94

Vocational school level

Field code number	Field	Applications		Admitted			With contract			With 2 years practical experience		
		Total	women	Total	Rates	women	Total	%	women	Total	%	women
3	Level 3 total	9237	4765	7444	81%	3142	251	3%	32	53	1%	37
314	Kindekarten teacher assistant	21	21	21	100%	21				3	14%	3
334	Trade and business	1414	1358	832	59%	773	5	1%	5	11	1%	11
350	Healthcare	141	136	136	96%	133				6	4%	6
352	Industry and handicraft	4233	1235	3925	93%	816	202	5%	4	13	0%	6
362	Agriculture, forestry and fishery	610	70	577	95%	47	13	2%		9	2%	7
366	Home economics	787	768	692	88%	676	1	0%	1	3	0%	3
370	Transport and communication	71	45	64	90%	40						
378	Service, catering and tourism	1616	1071	868	54%	573	30	3%	22	8	1%	1
389	Internal defence	344	61	329	96%	63						

Table 29. Rates of admission by fields of education in 1993/94

Technical school level (post-secondary)

Field code number	Field	Application		Admitted			With contract			With 2 years practical experience		
		Total	women	Total	Rates	women	Total	%	women	Total	%	women
4	**Level 4 total**	**5955**	**3707**	**3784**	**64%**	**2209**	**157**	**4%**	**24**	**349**	**9%**	**238**
414	Teacher training	306	304	195	64%	193				13	7%	12
418	Art and music	475	332	229	48%	167				6	3%	6
434	Trade and business	1447	994	678	47%	486				78	12%	65
438	Paralegal studies	197	95	81	41%	39				2	2%	
450	Healthcare	653	636	467	72%	457	3	1%	3	29	6%	25
452	Industry and handicraft	285	180	181	64%	86				7	4%	7
454	Techniques and technology	766	120	631	82%	97				79	13%	26
462	Agriculture, forestry and fishery	919	399	787	86%	341	2	0%		66	8%	56
466	Home economics	97	97	30	31%	30				2	7%	2
478	Service, catering and tourism	184	135	66	36%	44				3	5%	2
484	Mass media and documentation	212	206	136	64%	130				39	29%	37
489	Internal defence, other	414	209	303	73%	139	152	50%	21	25	8%	

3.2.5 Distribution of first-year students in vocational education according to educational origin (1993/94)

Tables 30 and *31* give data on the specific fields in which first-year students enrolled when entering a vocational programme. These tables also show the students' educational background.

Compared to academic year 1992/93, the percentage of first-year students with basic education entering vocational education decreased by 2 per cent in 1993/94. However, the number of students with upper secondary general education increased by 1 per cent. The percentage of students who had already completed a programme of vocational education grew from 2.5 per cent to 4 per cent. The level of education achieved by entrants to vocational education is increasing. The reasons behind this increase are not entirely certain, but one factor may be the changing needs of the employment market.

Schools are, for the most part, still offering the programmes that were needed before Estonia changed over to a market economy, but students are starting to request programmes that provide skills needed on the job market. Vocational programmes in the fields of services and business, have a high number of applicants and a relatively low rate of admissions. Individuals have responded more quickly than institutions to changes in Estonia's economy. This is not a surprise, as much more capital investment will be needed for teacher retraining and new equipment in order to make Estonia's system of vocational education viable.

It is possible that the increased educational attainment of the people applying to vocational programmes may be an indication of the lag in adjustment to the changing demands of the job market at an individual level. Young people, having completed one level of training, may realise that there are no jobs available, or that salaries are higher in other fields, factors which encourage them to apply for other programmes. When the educational background of applicants to vocational programmes is examined, we find that those with the highest level of education are going into fields that are currently in demand in the labour market.

N.B. Percentages which total more than 100 on *Table 31*, are due to errors in background data. In some cases first-year students may have completed more than one previous level of education and were registered under all levels of education completed in the database.

Table 30. Distribution of first-year students in vocational education according to educational origin and field of study
Vocational school level

Field code number	Field	Total admission		Basic school graduates %		Secondary school graduates %		Voc. educ. instit. graduates %	
		Total	women	Total	women	Total	women	Total	women
3	Level 3 total	**7444**	**3142**	**66%**	**59%**	**26%**	**36%**	**2%**	**3%**
314	Kinderk. teacher assistant	21	21	43%	43%	48%	48%	10%	10%
334	Trade and business	832	773	40%	40%	56%	57%	3%	3%
350	Healthcare	136	133	77%	79%	10%	10%	4%	3%
352	Industry and handicraft	3925	816	76%	66%	16%	28%	1%	4%
362	Agriculture, forestry and fishery	577	47	68%	2%	9%	89%	2%	9%
366	Home economics	692	676	80%	82%	11%	12%	2%	2%
370	Transport and communication	64	40	100%	100%	0%	0%	0%	0%
378	Service, catering and tourism	868	573	55%	49%	41%	48%	4%	3%
389	Internal defence	329	63	5%	25%	93%	65%	2%	10%

Table 31. Distribution of first-year students in vocational education according to educational origin and field of study

Technical school level (post-secondary)

Field code number	Field	Total admission		Basic school graduates %		Secondary school graduates %		Voc. educ. instit. graduates %	
		Total	women	Total	women	Total	woman	Total	women
4	**Level 4 total**	**3784**	**2209**	**32%**	**19%**	**60%**	**75%**	**9%**	**7%**
414	Teacher training	195	193	16%	17%	81%	81%	3%	3%
418	Art and music	229	167	35%	31%	52%	57%	3%	5%
434	Trade and business	678	486	5%	6%	90%	88%	6%	6%
438	Paralegal studies	81	39	0%	0%	100%	100%	0%	0%
450	Healthcare	467	457	7%	7%	88%	89%	6%	5%
452	Industry and handicraft	181	86	41%	0%	31%	65%	28%	35%
454	Techniques and technology	631	97	55%	26%	32%	48%	14%	29%
462	Agriculture, forestry and fishery	787	341	73%	58%	23%	31%	4%	6%
466	Home economics	30	30	77%	77%	93%	93%	7%	7%
478	Service, catering and tourism	66	44	0%	0%	97%	98%	3%	2%
484	Mass media and documentation	136	130	0%	0%	99%	99%	4%	4%
489	Internal defence, other	303	139	8%	15%	67%	83%	26%	3%

3.3 Process

3.3.1 Drop-out rate in secondary education

Definition

The drop-out rate shows the percentage of students who drop-out at the various levels of secondary education.

Table 32. The drop-out rate in secondary education

Year	Upper secondary general education	Vocational schools	Post-secondary technical education
1991/92	7 per cent	10 per cent	14 per cent
1992/93	3 per cent	10 per cent	15 per cent

Tables 33, 34 and *35* show drop-out rates in 1992/93 by levels and fields. Drop-outs in the field of teacher training, (*Tables 33,34,* and *35*.), includes a large percentage of drop-outs among people enrolled in post-secondary technical programmes which train pre-school assistants. Almost 50 per cent of the people enrolled in the programme to train kindergarten (pre-school) assistants, drop-out. Although this is not a large programme, the drop-out rate has a deleterious effect when averaged with the other drop-out rates from teacher training programmes. People enrolled in the kindergarten (pre-school) assistant programme have uncertain future prospects. The need for this type of training has decreased because of the closure of many kindergartens (pre-schools). Few parents are taking their children to these organizations any more because they are expensive, and are no longer funded by large industries, as they were in the past.

There are also high drop-out rates in programmes which train health-care workers, such as nurses' assistants. Low salaries and an uncertain future may motivate many of these withdrawals. Similar uncertainty about the future of agriculture in Estonia combined with out-of-date programmes which were designed for state and collective farms also contribute to the high drop-out rate from those vocational programmes.

Although we now know the drop-out rates from various vocational programmes, the indicator shows only trends, it does not provide an adequate explanation of the factors motivating student behaviour. These factors need to be thoroughly researched and analysed in order to establish an effective policy of vocational education.

Table 33. Drop-out rate by field of education in 1992/93 (Vocational school level)

Vocational school level		Students	Drop out rate	
			total	failure
314	Kindergarten teacher assistant	27	19%	19%
318	Fine and applied arts	47	2%	2%
334	Commercial and business	1185	5%	2%
350	Medical and health	129	50%	17%
352	Trade, craft and industry	10223	10%	6%
362	Agriculture, (forestry and fishery)	1711	14%	5%
366	Home economics	1359	12%	6%
370	Transport and communication	686	11%	9%
378	Service trade	1712	6%	3%
389	Other	182	10%	1%
Total by level		**17261**	**10%**	**6%**

Table 34. Drop-out rates at vocational school level Breakdown of the field "Trade craft and industry"

Vocational school level		Students	Drop out rates	
35212	Food processing trades	292	12%	**failure**
35216	Building trades	2051	11%	6%
35222	Electrical and electronics trades	1430	10%	6%
35232	Mechanical and metal trades	3302	13%	8%
35262	Woodworking trades	775	6%	2%
35272	Leather trades	178	8%	3%
35274	Sewing trades	1473	6%	3%
35276	Textile trades	599	11%	9%
35278	Graphic and bookbinding trades	73	18%	8%
35299	Other trades	50	18%	14%
Total by field		**10223**	**10%**	**6%**

Table 35. Drop-out rate by field of education at post secondary technical level

Post-secondary technical level		Students	Drop out rate	
			Total	failure
414	Teacher training	918	15%	7%
418	Fine and applied arts	811	9%	5%
434	Commercial and business	1372	11%	5%
438	Law and jurisprudence	171	6%	1%
446	(Mathematics and) computer science	67	3%	0%
450	Medical and health	1570	12%	3%
452	Trade, craft and industry	726	16%	8%
454	Engineering	3877	16%	9%
458	Architecture	63	11%	0%
462	Agriculture	2358	22%	10%
466	Home economics	92	16%	0%
470	Transport and communication	300	0%	0%
478	Service trade	264	9%	6%
484	Mass communications and doc.	240	13%	8%
489	Other	507	6%	1%
Total by level		**13336**	**15%**	**7%**

3.3.2 The rate of failure

In vocational education institutions, as a rule, students who fail, are not allowed to repeat a course or a class. There are some exceptions to this policy, if health or other serious reasons can be proven.

Data on drop-outs from programmes of vocational education can be divided into two groups: those who, of their own volition, dropped out of programmes, and those who failed courses and were asked to leave. Some of those students who failed courses may be permitted to repeat them. At the present time, the status of those who have voluntarily dropped out of a programme of vocational education is uncertain. In the past, they were not allowed to re-enroll in the programme, but at the present time petitions for re-enrolment are being judged on an individual basis at the school level. The vocational database does not incorporate the figures on these students as a standard policy which establishes official guidelines on their status has not yet been developed.

Indicators for the failure rate can be found in *Tables 33, 34,* and *35*) "Drop-out rate by field of education by level, 1992/93".

Table 36. Vocational school graduates who obtained vocational and general upper secondary education

1991	4398	59%
1992	3477	45%
1993	2982	43%

Diagram 13. Distribution of graduates by type of education

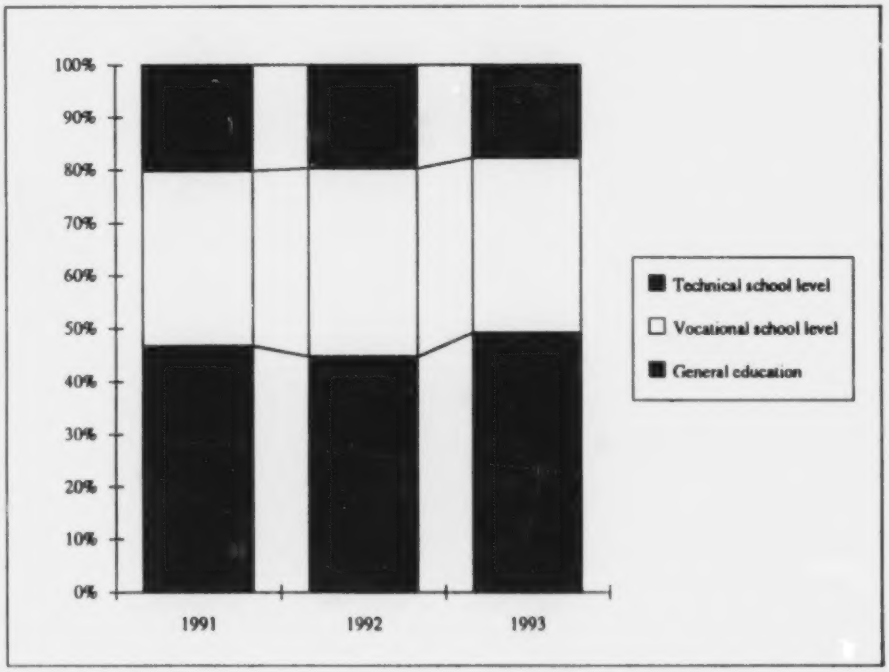
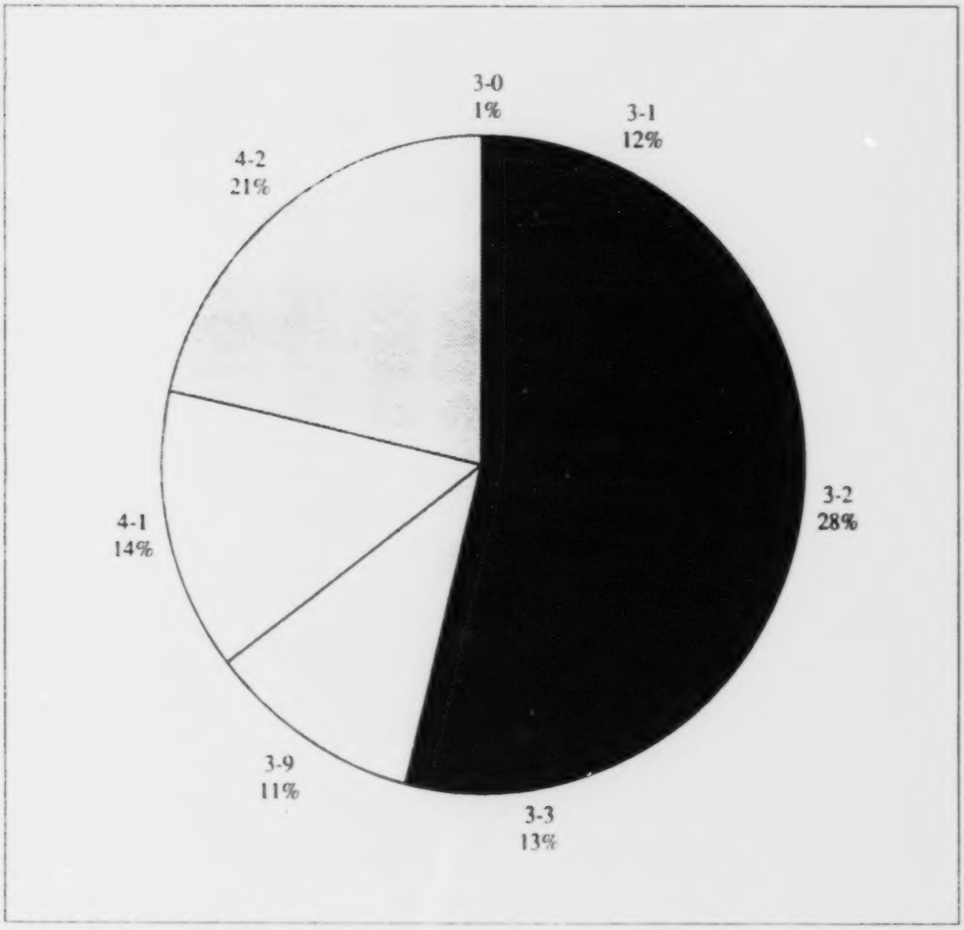
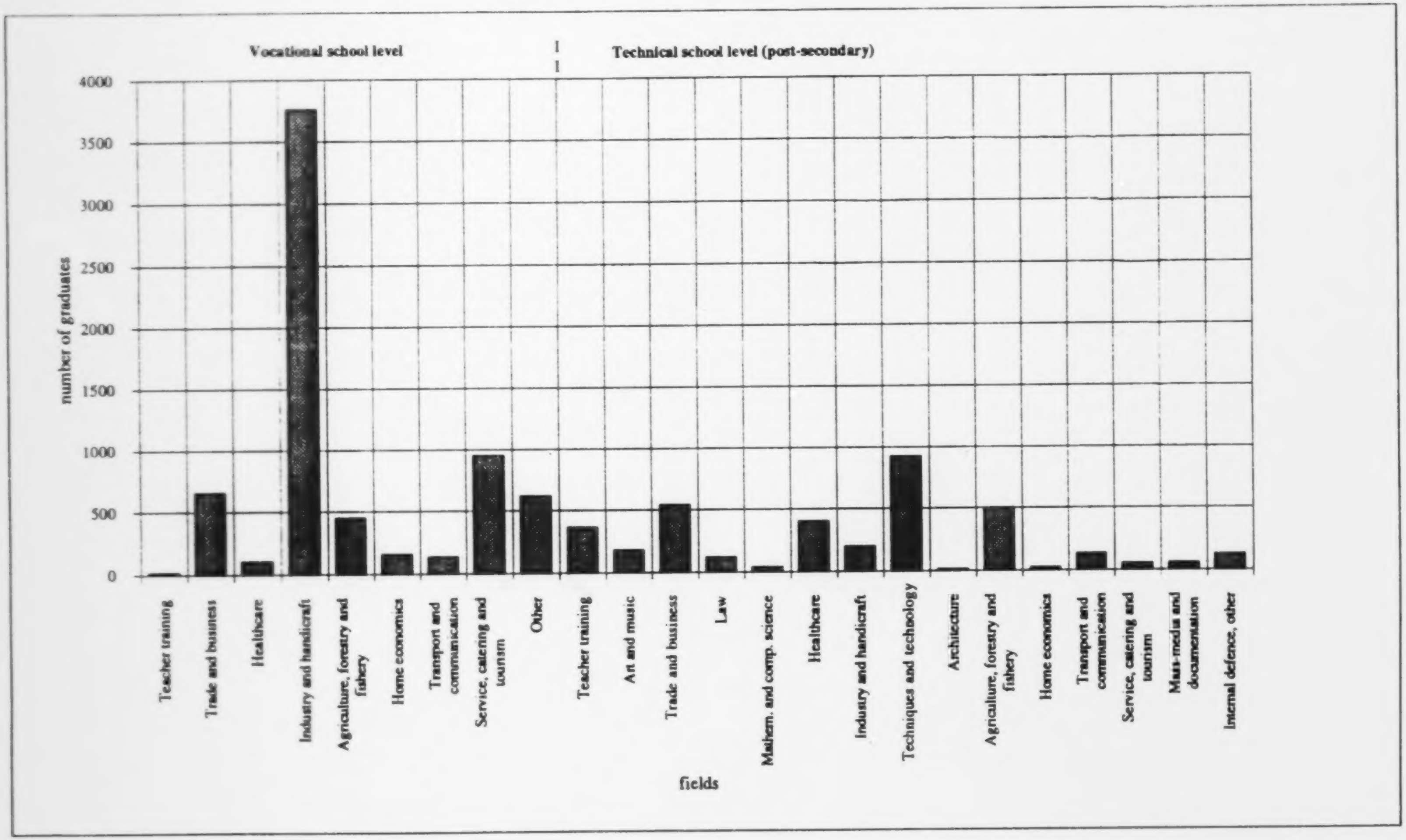


Diagram 14. Education level of graduates



3-0	Basic vocational education and basic education
3-1	Vocational education
3-2	Vocational and upper secondary general education
3-3	Vocational educ. based on upper sec. gen.education
3-9	Vocational education (limited skills)
4-1	Post-sec. technical education, based on basic educ.
4-2	Post-sec. technical, based on upper sec. general educ.

Diagram 15. Number of graduates by fields, 1993/1994



The average failure rate in vocational schools is as high as 6 per cent; on the post-secondary technical level of education the rate of failure is 7 per cent. In upper secondary general education the rate of repetition is 1.4 per cent.

Thorough research work should be carried out to analyze the reasons for the higher failure rate in vocational education.

3.4 Outcomes

3.4.1 Distribution of graduates by type of education

As the percentage of students enrolled in upper secondary general education has increased, the percentage of graduates from upper secondary general education programmes has also increased. Students seem to be choosing an upper secondary general rather than a post-secondary technical education based on basic school; proportionally post-secondary technical schools have lost a greater percentage of their admissions and graduates than vocational schools. The figures that track this process are shown in *Table 36* and *Diagrams 13, 14* and *15*.

3.4.2 Distribution of school-leavers

The figures for the distribution of school-leavers entering the labour market will be found on *Table 37 and Diagram 16*. In this document the term "School-leaver" will refer to both those who have graduated from a programme of education and those who have dropped out of a programme of education.

Diagrams 14 and *15*, give additional information about graduates by level of education and by field.

3.4.3 Registered unemployed by type of education

The Labour Board has divided the data concerning the level of education of the registered unemployed into two categories:

- General education (basic and upper secondary general education);
- Vocational education or higher education (vocational school level education, post-secondary/technical education, higher education and scientific degrees).

Tables 38 and *39* and *Diagrams 17, 18, 19*, and *20*, show:

- Registered unemployed by type of education and gender in 1992/93;
- Registered unemployed by gender and age in 1992/93.

Source: Estonian Labour Market Board, Infoleht

Table 37. Distribution of school-leavers entering the labour market

		1992	1993
1	Basic school graduates	1283	944
2	General upper-secondary school graduates	3404	5014
3	Voc. school grad. and technical school graduates	10904	9618
4	Tertiary education graduates	2174	3510
5	Drop-out from general education	4903	5146
6	Drop-out from vocational education	4094	3744
7	Drop-out from tertiary education	2853	1108

Diagram 16. Distribution of school-leavers by educational level (1993)

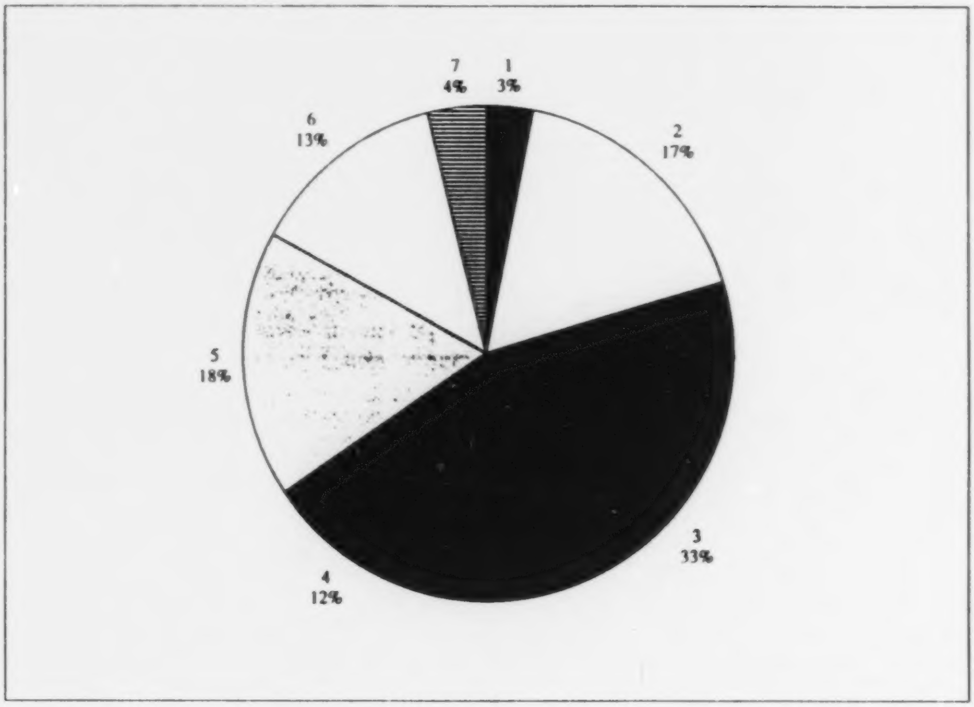


Table 38. Registered unemployed by type of education and gender in 1992/93

	Women			Men		
	general educ.	voc.ed+hig.ed	Total	general educ.	voc.ed+hig.ed	Total
1992 I quarter	34%	66%	664	42%	58%	1743
1992 II quarter	41%	59%	1661	51%	49%	4076
1992 III quarter	41%	59%	2596	54%	46%	6134
1992 IV quarter	40%	60%	4316	54%	46%	10578
1993 I quarter	43%	57%	6198	55%	45%	15371
1993 II quarter	40%	60%	4968	54%	46%	13179
1993 III quarter	40%	60%	3922	52%	48%	10796
1993 IV quarter	39%	61%	4528	49%	51%	11791

Diagram 17. Distribution of school-leavers by educational level (1993)

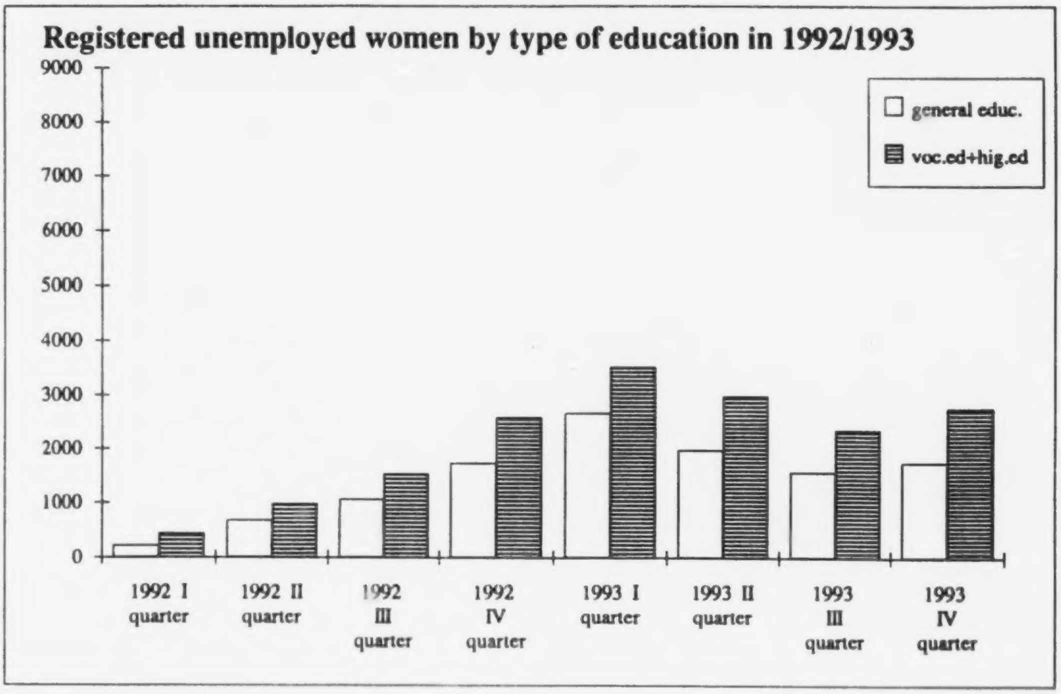


Diagram 18

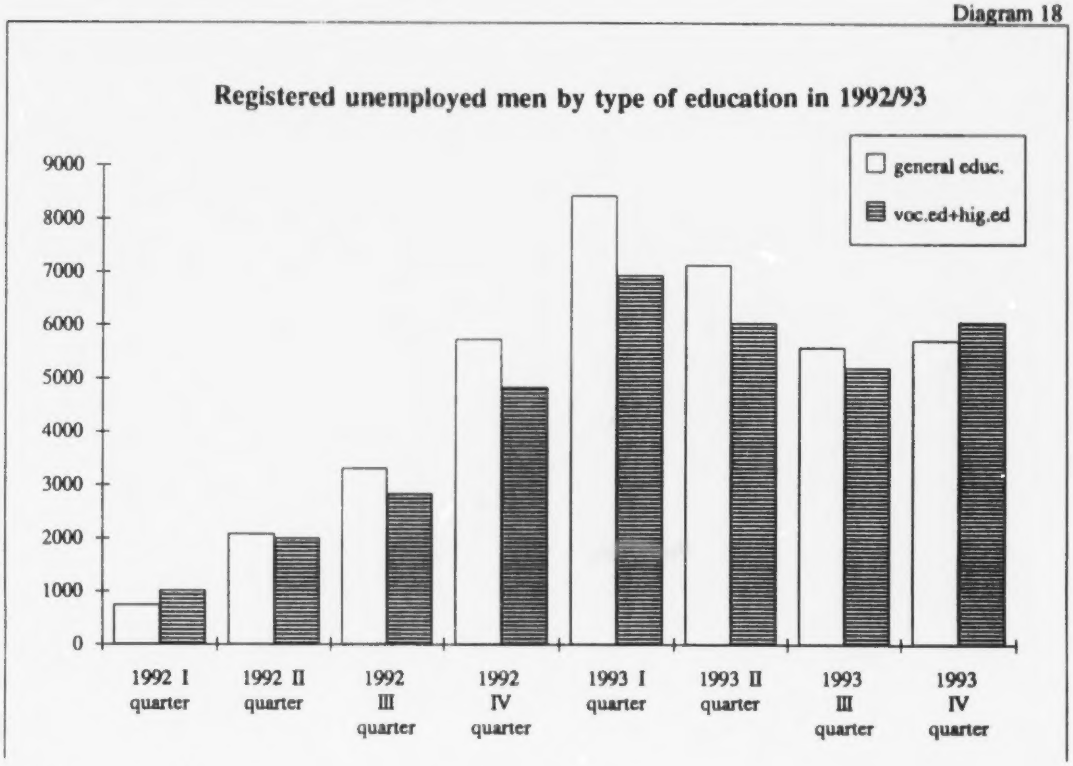


Table 39. Registered unemployed by gender and age in 1992/93

	Women				Men			
	16-24	25-49	50-55	Total	16-24	25-54	55-60	Total
1992 I quarter	24%	69%	7%	1448	29%	58%	13%	960
1992 II quarter	21%	71%	8%	2979	26%	62%	12%	2758
1992 III quarter	20%	70%	10%	4367	19%	64%	17%	4363
1992 IV quarter	23%	68%	9%	7431	21%	63%	17%	7463
1993 I quarter	22%	68%	11%	10468	21%	64%	15%	10818
1993 II quarter	20%	67%	13%	9797	20%	62%	18%	9816
1993 III quarter	16%	63%	21%	7351	16%	63%	21%	7351
1993 IV quarter	20%	65%	15%	8840	18%	60%	23%	7479

Diagram 19. Registered unemployed women by age in 1992/1993

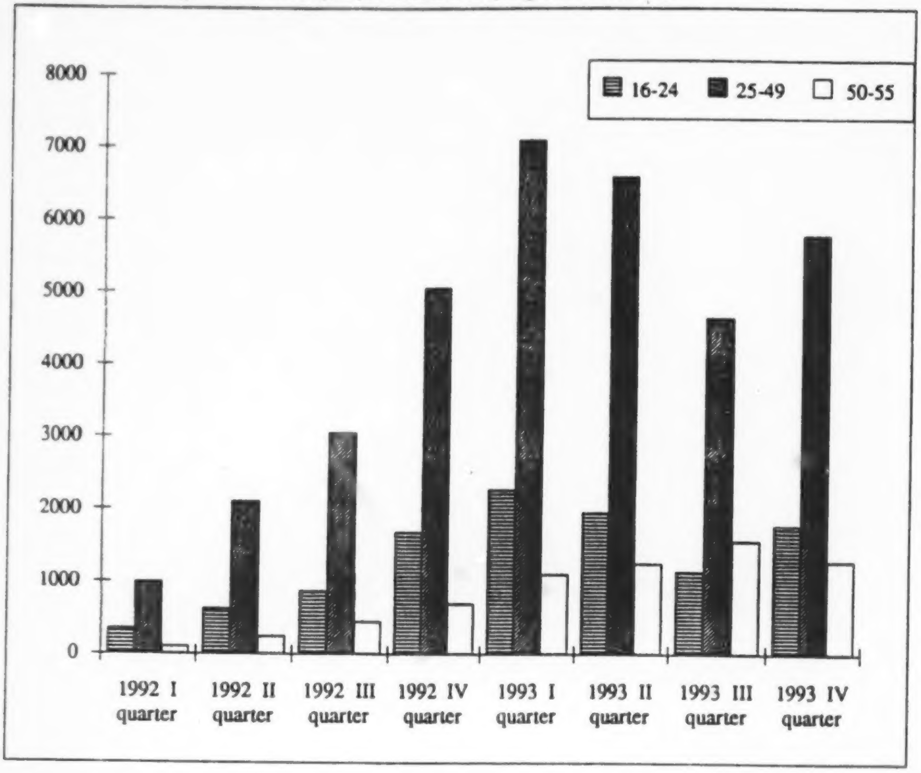
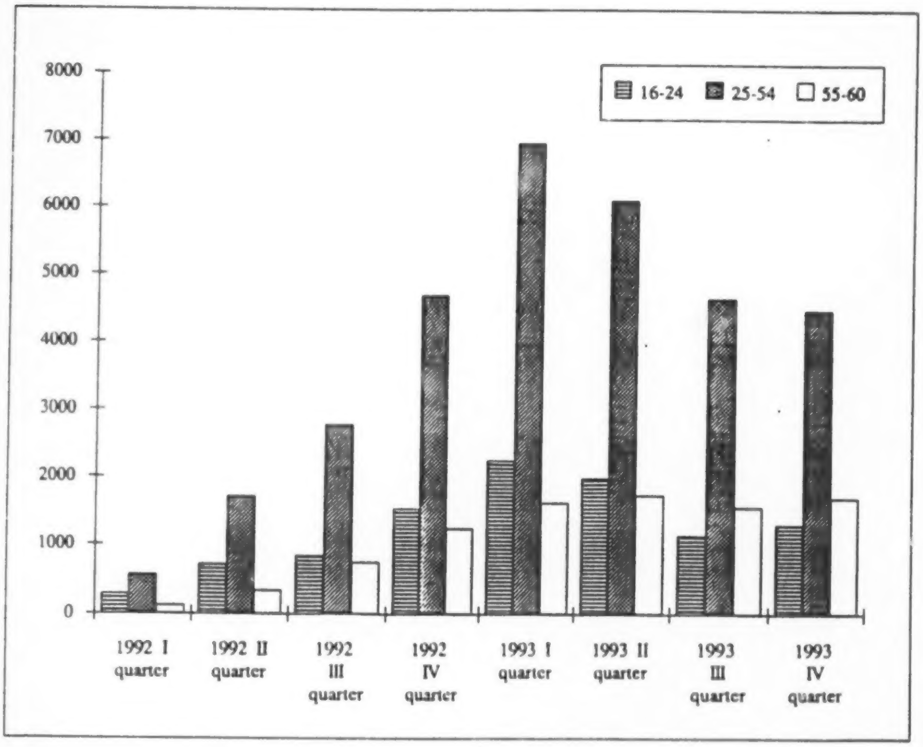


Diagram 20. Registered unemployed men by age in 1992/1993



The percentage of people who have some form of upper secondary vocational or professional education but are unable to find work has increased. Nevertheless, more than half of the people who are registered as unemployed have a general education. In 1992 57.7 per cent of unemployed people had some level of general education. That number dropped to 54.9 per cent in the 1993 unemployed figures. The reasons behind the increase of unemployed school-leavers with some background in vocational education must be investigated. The drop-out rate from tertiary and upper secondary vocational institutes has decreased.

The percentage of unemployed women with a vocational or higher education is higher than the percentage of men with a vocational or higher education. The unemployment among women is lower than among men. The percentage of unemployment young people, both women and men has decreased from 1992 to 1993. At the beginning of 1994, the share of unemployed with general education has increased by 25 per cent.

Tallinn Labour Exchange figures show that in the first quarter of 1994, 51.4 per cent of all jobs offered required some form of vocational training with a background in basic education. 19.9 per cent of the jobs required vocational graduates with upper secondary education. 15.3 per cent of job applicants had tertiary education, 22.2 per cent had post-secondary technical education and 40.7 per cent had upper secondary education. Vocational education is extremely important for the most mobile sectors of the labour force. Formally our job seekers are "over educated" compared with the required educational level for jobs offered. And often they refuse to take a job with a lower status in society. To individual it is rather difficult to get over the psychological barrier, that he must accept a job for which the requirements are considerably lower than his previous schooling. Unfortunately, the possibilities for retraining and upgrading are scant or they are too expensive.

Part III

Implications for the future orientation of the Estonian system of vocational education, and suggestions for the improvement of the database

1. Implications for the future orientation of the system of vocational education

Having chosen to build a democratic society based on a market economy, Estonia now has to implement effective educational policies that will help to develop entrepreneurial skills and attitudes. In order to establish vocational programmes that can produce proactive, self-motivated and flexible graduates who are committed to a life-long process of learning, the current system of vocational education must undergo reform. Our ability to compete internationally depends on increasing the quantity and quality of the goods we produce and supporting the development of small and medium-sized enterprises in the private sector.

Although Estonia's unemployment rate is relatively low at the present time, our honeymoon with capitalism cannot be expected to last. Our larger industries, (200 or more employees), currently employ over 47.4 per cent of the working population. They are, however, facing shrinking sales because of trade barriers which have been erected in their former markets and are largely unable to successfully compete in western markets because of the poor quality of goods produced and a low rate of production. People who are entering, and currently participating in, the job market must be trained in the skills needed to operate small enterprises.

It is difficult, in this period of transition, to predict the professional qualifications that will be needed on a long-term basis. *This uncertainty is exacerbated by a lack of information on employment and education, and poor distribution of the information that does exist.* There is a need to the specification of the organizing principle around which the information will be collected, analyzed, and presented. A system of information exchange must be established in order that the data collected by the various ministries and private enterprises is collated and distributed in a timely and effective fashion. This system may be as simple as holding quarterly meetings for the people in charge of information-gathering and policy development in the government and private enterprises. Through this mechanism, public and private partners in the process of rebuilding Estonian education will be made aware of each other's needs and plans for the future.

At the present time, the vocational education system in Estonia is in need of direction. There is currently only one person in the Ministry of Culture and Education who is working full-time on vocational education. Although he is doing a good job, considering the circumstances, the task of restructuring a system of education cannot be adequately carried out by one person. Decisions affecting school curricula, equipment improvement, teacher training, and education policy require the commitment and expertise of a full-time team.

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Developing ongoing ties with the Ministry's partners in education has also proved to be more difficult than anticipated. We have been able to achieve the most progress in this area when working on concrete projects, and have faced the most difficulty when trying to develop a co-ordinated approach at the macro-level.

In order to structure a clear and effective policy of vocational education the following actions are necessary:

- The causes of *declining enrolment* in vocational education must be determined.
- The Ministry of Culture and Education should *consult with its social partners in Estonia and the international community to determine how best to establish effective and up-to-date programmes* of education in the sectors of vocational education that the Ministry has identified as being essential for Estonia's future development, (i.e. agriculture and forestry, food industry, construction, manufacturing, telecommunications, transport and logistics, and goods, services and tourism).
- A *useful and well-rounded programme of general education* should be incorporated into every vocational programme. This programme may not have the same focus as those offered in gymnasia, but it will teach the skills that are necessary for integration into society and working life (e.g. linguistic, scientific and other knowledge) and provide the basis for further studies in the future.
- The Estonian system of *vocational education should be standardized both internally and externally.*

Internal standardization would involve putting standard curricula into effect throughout the vocational system. At the present time, the Ministry of Culture and Education has developed requirements for the level of instruction that should be offered in vocational programmes. However, it is difficult to enforce these guidelines because of a *lack of up-to-date textbooks* written in Estonian and Russian. Another barrier to a consistent system of education is the *lack of co-ordinated training for teachers and trainers in the vocational system.* We can also say for sure that today Estonia needs qualified vocational teachers. There is a system for training teachers in the general subjects, but a system for training teachers in the vocational subjects and a system for retraining, refresher courses, continuing and further training of teachers must be established very soon. Development work to create a system is in the process of being developed in Tallinn Pedagogical University. One of the problems is to determine what levels and combinations of vocational skills and pedagogical skills will be necessary to form effective teachers in vocational education. Even teachers who have tertiary-level pedagogical training have not been given the opportunity to take courses in professional development. As a result, they are unlikely to be aware of the most current developments in the techniques they are teaching, and they may not utilise teaching methods which emphasize self-motivated problem solving. In addition to these needs, investments must be made in the infrastructure of the vocational system, as it is often impossible to offer a relevant education because of *outdated equipment and deteriorating buildings.*

- External standardization would involve comparing Estonian standards of education to international standards. At a school or Ministry level, this could be accomplished by *forming further partnerships with other European schools or ministries that are among the leaders in the field of vocational education.*

- The system of *vocational education should be structured so that it helps to minimize regional inequalities.* Developing vocational programmes for rural areas is especially important. The excessive specialization that was characteristic of the Soviet-imposed system of education in Estonia will condemn rural areas of the country to an impoverished future, if it is allowed to continue. It is no longer acceptable to teach people living in rural areas the rudiments of agriculture and home economics; if Estonia is to be successful, the focus of vocational education in all areas of the country must be broadened.

- Retraining people is an important part of vocational education. *The Ministry of Culture and Education and the Ministry of Labour, in conjunction with private enterprises, need to establish programmes that will teach unemployed people the necessary skills to find new jobs* and thus allow them to be a productive members of society.

- Discussions should be held with other government ministries, especially the Labour Board concerning how to provide *incentives which will combat declining enrolment in areas of vocational education that are indispensable to society*, such as health-care, social work and education. This decline in enrolment is probably symptomatic of the low wages offered in these fields. If this trend continues, action should be taken by the government, in conjunction with its ministries, to reverse it.

- There should be greater *co-operation between government-sponsored vocational programmes and privately owned organisations which offer vocational programmes, in order to ensure that a basic level of training* is offered throughout the public and private system of education.

One of the major problems with the current system of vocational education is, of course, a lack of funds. The anticipated expenditure per student on vocational education in 1994 will be 5,937 EEK. It is barely possible to run the system as it exists on that amount of money; there is no surplus for necessary expenditures such as retooling, retraining teachers, developing curriculum, repairing buildings and writing new textbooks. Nevertheless, Estonia has been fortunate enough to have received aid from other countries which will allow the process of restructuring to continue.

The Ministry of Culture and Education and the National School Board have faced some difficulty gaining the support of their social partners for changes in the system of vocational education. Nevertheless, the Ministry is currently working hard to revive its relationship with its partners in education in order to make sure that real needs in the vocational system are being met, and that the funds provided by PHARE, Denmark, Finland and other countries for vocational education renewal are being used effectively.

Estonia must also secure funds to ensure ongoing renewal of vocational education. Unlike countries which have long-standing market economies, Estonia's private sector is still in the process of development; there can be little hope of substantial financial support for vocational education from that sector of the economy. (It may be possible, however, to develop apprenticeship and in-service training programmes in conjunction with private enterprises). The funds that the government provides must be used as effectively as possible. A new system of financing vocational education, based on fields of education, is being developed. At the present time, vocational and professional secondary schools are given government financing based upon the number of students they educate, regardless of field. The financial system, as it is now constituted, creates an incentive to provide low-cost programmes which can train large numbers of students, while neglecting programmes which require a larger investment in equipment and cannot accommodate a large number of students.

Decision-making structures must also be clarified. Schools and local and municipal governments are often the de facto determinants of programmes offered in their schools at this time, as they are able to respond to shifts in student population and student demands quickly. Although school participation in determining curriculum is welcome, the Ministry must also be able to ensure that priorities set on the national level are being met and that the money spent on vocational education is being used effectively. Clarification of decision-making structures will help to accomplish this, but even more important is improving the Ministry's ability to provide a feasible alternative to school-designed programmes. The development of standard textbooks, the acquisition of new equipment and the establishment of teacher-training programmes will help to alleviate this problem.

As the Commission of the European Communities' White Paper on *Growth, competitiveness and employment: The challenges and the way forward into the 21st Century* pointed out, well planned education and training methods should produce positive results in three areas:

- they should combat unemployment by training young people and retraining staff who have been laid off;

- they should boost growth by strengthening the competitiveness of business;

- they should develop a form of growth that produces increased employment by improved matching of general and specific skills to changes in the markets and to social needs.

Vocational training not only acts as an instrument of active labour market policy by adapting vocational skills to market needs; it is also an investment in human resources which is necessary to increase competitiveness and to make it easier to assimilate and spread new technologies. The essential role of vocational training in a healthy society makes the current condition of Estonia's system of vocational education an extremely serious problem. Declining enrolment, and static or makeshift programmes of vocational education do not bode well for the future, although, some change is taking place. Funds provided by foreign aid have helped to initiate the process of reform, but additional funds, and training programmes that provide skill transfers which will allow for a shift in the paradigms of the Soviet-imposed system of vocational education, are necessary.

2. Suggestions for improving the databases

In order to improve the accuracy of the database, it will be necessary to *create a standard terminology* in Estonian. Estonia's past history of Soviet-occupation and new movement toward the west has created a multiplicity of terms for every situation. This causes confusion when trying to compare like quantities. It is not always certain that what one document calls, for example, professional secondary education, is exactly the same type of programme as that mentioned in another document. Another problem arises from the *methodology of gathering statistics*. It is often difficult to compare figures from different sources, as there are no standard control mechanisms (such as a standard division of age groups, for example). Estonian statisticians and the relevant government organisations must come to some sort of an agreement on terms and methods that will permit easy and accurate comparison of statistics within Estonia and internationally.

There are, undoubtedly, some omissions in the information available from the Estonian educational databases. The need for a *database that compiles statistics on individual behaviour within the educational system is obvious, as is the need for tracer and follow-up studies* to determine how successfully graduates have integrated with the working world. Nevertheless, although the development of these new sources of information is important, it will be equally important to *develop programmes which train people how to make best use of the existing databases.*

The development of databases which record patterns of individual behaviour must commence as soon as possible. The basis of this system has been put in place, as most schools in Estonia now have IBM-compatible computers which will allow them to develop databases on their students. This is a radical change from the former system of collecting data manually. The old methods of data collection precluded the development of an individually-focused database, as there was no possibility of investing the time needed to transfer written statistics into the computer. The challenge at the moment time is to standardize programmes offered by individual schools, and the terminology and methodology used to collate figures so that the data from different schools can be accurately compared. The Ministry of Culture and Education hopes to make an individually-based database operational by 1996.

Concurrent with this process, however, must be a *systematic evaluation of present databases*. This evaluation should not be limited to the Ministry of Culture and Education. It should also take into account the information in databases that are compiled by other Ministries and private groups, and it should make suggestions as to the most effective and cost-efficient manner of communicating information between various groups. For example, the Ministry of Labour maintains individually-based databases on the unemployed. The Ministry of Culture and Education needs to be able to access these resources and to have some input into the questions that are asked if informed decisions about education are to be made. Compatible software programmes in the various ministries of the Estonian government are also necessary in order to minimise delay in incorporating information.

The evaluation should also identify *crucial decision-making information* and make suggestions on how to improve the collection of this information.

While the evaluation is taking place, *a policy of hiring additional people in the statistical department of the Estonian Ministry of Culture and Education should be instituted.* One of the major factors preventing full utilisation of existing databases is chronic understaffing in the Ministry. The Estonian government does not have the funds necessary to pay for additional staff members, but the statistical department can no longer function effectively without additional personnel. Currently, our software systems designer and engineers only work on a part-time basis because the Ministry cannot afford the additional full-time salaries. It will be necessary to hire and train staff members during the process of evaluating databases, so that when the final evaluation report is submitted, the senior members of staff will be able to attend any necessary *training programmes*. Currently, it is almost impossible to commit any employee time to training or improving the present system of data collation because the everyday workload is overwhelming. Additional staff is also needed to assure continuity in the department.

A system of educational indicators that transcends the limitations of statistics must also be established. While statistics can track behaviour, it is not possible to accurately determine the reasons for this behaviour. This knowledge is essential if Estonian public authorities are to be able to set guidelines and give clear instructions on the objectives to be achieved in education.

Statistics will be an essential part of determining how well the Estonian system of education is meeting its objectives. Projects such as standardizing the categories of the Estonian system of education with ISCED categories, and determining the level of training of Estonian teachers in relation to their European counterparts will help to determine in which direction the Estonian system of education will move in the future.

Appendices

Appendix I

Programme

Monday, 19 December 1994

09.00 Welcome of participants and distribution of documents

09.30 - 12.30 Opening session by J. Hallak, Director, IIEP
Objectives of the Workshop by F. Caillods

Changes affecting technical and vocational education and presentation of the research conducted in :

- Hungary by J. Lannert
- Estonia by R. Neudorf
- Lithuania by A.V.Bumelis/V. Rimkeviciene

Poland by S. Szczurkowska

02.00 - 06.00 *Theme No. 1: Changing the Facilitator: architecture of the education system. F. Caillods*

- *Introductory paper: The process of changing the architecture of the educational system in Eastern Europe by P. Grootings*

- The position of the various actors in Hungary, Estonia, Lithuania and Poland
- General discussion

Tuesday, 20 December 1994

09.30 - 12.00 *Theme No. 2: Decentralization of the management of technical and vocational education*

- *Introductory paper: Flexibility and regulation of vocational education and training by M. Durand-Drouhin*

Sub-theme No. 1: Coordination between actors at the central level and links with local government. Facilitator: D. Atchoarena

- The situation in Hungary, Lithuania and Poland
- General discussion.

12.00 - 12.45 *Sub-theme No. 2:* The actors at the local level. How does autonomy work in practice? Facilitator: F. Caillods

- *School autonomy in Western Europe by E. Flitner*

02.15 - 03.45 *Sub-theme No. 2 (continued)*

- The situation in Hungary, Lithuania, Poland
- General discussion

04.00 - 06.00 *Theme No. 3: The role of the enterprise in vocational education and its relation with the economy.* Facilitator: O. Bertrand

- The situation in Hungary, Lithuania, Poland
- General discussion

Wednesday, 21 December 1994

09.30 - 12.30 *Theme No. 4: Monitoring the changes. Facilitator: D. Atchoarena*

The need for an information base
- The case of Estonia
- General discussion

The conduct of tracer studies
- The experience of Lithuania.
- General discussion.

12.30 *Synthesis and closing session by F. Caillods*

Appendix II

List of participants

Participants

Mr Frantisek Bartak
Deputy Director
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UNESCO/IIEP
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Mr David Atchoarena
Programme Specialist

Mr Oliver Bertrand
Consultant

IIEP publications and documents

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Manpower and employment.

Demographic studies.

The location of schools (school map) and sub-national planning.

Administration and management.

Curriculum development and evaluation.

Educational technology.

Primary, secondary and higher education.

Vocational and technical education.

Non-formal, out-of-school, adult and rural education.

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Lennart Wohlgemuth (Sweden), Director, Nordic Institute of African Studies, Uppsala.

Designated Members:
K. Y. Amoako, Director, Education and Social Policy Department, The World Bank
Harka Gurung, Director, Asian and Pacific Development Centre (APDC), Kuala Lumpur.
Cristián Ossa, Director, Macroeconomic and Social Policy, Analysis Division, Department of Economic and Social Information and Policy Analysis, United Nations.
Tito Egargo Contado, Chief, Agricultural Education and Extension Group, Human Resources, Institutions and Agrarian Reform Division, Food and Agriculture Organization (FAO).

Elected Members:
Isao Amagi (Japan), Special Adviser to the Minister of Education, Science and Culture, Tokyo.
Mohamed Dowidar (Egypt), Professor and President of the Department of Economics, Faculty of Law, University of Alexandria, Alexandria.
Kabiru Kinyanjui (Kenya), Senior Programme Officer, Social Sciences Division, International Development Research Centre (IDRC), Nairobi.
Tamas Kozma (Hungary), Director-General, Hungarian Institute for Educational Research, Budapest.
Yolanda M. Rojas (Costa Rica), Academic Vice-Rector, University of Costa Rica, San José.
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The volume

The transition which is currently sweeping through Central and Eastern European countries has shaken the foundations of the vocational education and training systems in these countries. Enterprises which are now forced to be competitive no longer recruit all vocational education graduates and they no longer provide, as they used to, students with practical training. Vocational schools have thus lost their main support as well as employment opportunities for their graduates. State funds also have become scarce, limiting other financial resources for training. This is again endangering the quality of the training provided.

Yet a qualified workforce, able to produce goods and services according to international standards, is necessary to support the current economic reform and the emergence of an economy able to compete on international markets. This requires an extensive investment in training, retraining and upgrading of the workforce. A profound reform of the system of vocational education is needed, affecting the structure, the curriculum and the teaching methods.

Just as important are the changes that should affect the management of the vocational education and training system: the decentralization of the decision-making process, the establishment of new relations with the enterprises and the world of work in general, and the definition of proper regulating and monitoring instruments.

Analyzing the changes that are taking place in the management process in particular, assessing the present conditions of the vocational education and training institutions and evaluating the impact of some of the measures which have been taken were the objectives of the programme undertaken by the IIEP with the support of the European Commission. This programme aimed at training researchers from Central and Eastern European countries in the area of the management of the vocational education and training system.

In the framework of this programme five researchers from Estonia, Hungary, Lithuania and Poland conducted a research in their own countries and their reports were discussed during a workshop held at the IIEP.

The present volume contains the four country reports as well as an outline of the major research findings and a summary of the workshop's discussions.

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